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ABSTRACT

To gain an understanding of the development of the composing process, researchers observed, categorized, analyzed, and collected the writing of 10 Papago third and fourth graders in the Indian Oasis Public School District of Arizona over a period of two years. Of 30 children originally chosen to represent lower, middle, and upper development levels, 6 became the focus of in-depth study. Researchers collected data from observation; videotapes; interviews with parents, children, and teachers; and debriefing notes. They also studied 300 English language texts (over 17,000 words) produced by the children in regular classroom settings to determine the status and development of the orthographic features (spelling, punctuation), syntactic features (clauses, phrases, terminable units), and semantic and pragmatic issues including textual cohesion, contractions, dialect, metalinguistic knowledge, and overt behaviors accompanying writing (such as revision, subvocalization, rereading, interruptions, resource use, stop and think). The report describes the findings and the educational environments in the children's classrooms. It includes detailed analyses of the development of the writing process of each of the six children studied in depth. The analyses include information regarding the children's background, samples of the children's work, excerpts from the interviews, and descriptions of the various aspects of the writing process. (SB)

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A Two-Year Case Study Observing the Development of Third and Fourth Grade Native American Children's Writing Processes

By Yetta Goodman

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ABSTRACT

Almost 300 texts of over 17,000 words were collected over two years during which the classroom writing of ten Papago third and fourth graders was observed, categorized and analyzed. The findings are based on statistical data and in-depth case studies concerning the development of orthographic features, (spelling, punctuation, etc.); syntactic features, (T-units, clauses and phrases); and semantic and pragmatic issues, (textual cohesion, contractions, dialect, metalinguistic knowledge and overt behaviors accompanying writing).

The study demonstrates the development of writing and shows the complex interrelationships between the writer, the social context of the classroom and the evolving nature of the text. Though the background and culture of these Native American subjects in public elementary schools on the Papago reservation differed sharply from those in other studies of writing development in this age group, the findings are consistent with other studies and the subjects write very much like other developing writers of English.

The findings will be disseminated to researchers and teachers through professional meetings and written works and will focus on developmental descriptions of writing and a theoretical understanding of the writing process as well as on curriculum development and instructional implications of writing in the classroom.

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Dedicated to:

THE YOUNG AUTHORS WITH WHOM WE WORKED AND THEIR CLASSMATES.

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CHAPTER I - WHY STUDY WRITING

In recent years, researchers have begun to identify and understand some of the significant variables of the writing process, especially in young children developing literacy. While research in writing continues to lag behind that in reading, a significant body of knowledge is growing through case studies and classroom observations done by researchers such as Graves (1975, 1982), Emig (1969), Bissex (1980), Milz (1982), King and Rentel (1981), and Staton (1982), among others. Educational research needs to build on this knowledge through studies with varied ethnic and age populations in order to develop understanding about the nature of children's writing development. Knowledge about the development of writing is invaluable to educators in building soundly based writing curricula. This study will make a contribution to that knowledge.

For the purposes of this study, the writing process encompasses a child's production of written language which includes activity before, during, and after writing. This view of writing or composing takes a time-expanded view of writing as more than just the mere writing down of words at one point in time and more than just an examination of the child's final product. The writing process includes:

children choosing or being given a topic;
children's rehearsal of that topic through conversation, drawing or outlining;
the many interactions children engage in during writing;
the problems children solve and the strategies they use while composing;
children's examination of their product after writing;
and all language and concepts children express about their own writing or about writing in general.

This study attempts to clarify, to confirm or disconfirm, and to add to the knowledge about the development of the writing process already discussed by Graves (1975, 1982) and the other writing researchers mentioned earlier, by applying similar research methodologies to a culturally distinct population. Work to date that has been done with young writers (Harste, Burke, and Woodward, 1983; King and Rentel, 1981) has identified variables that appear to be significant, but additional data with diverse populations is needed in order to ensure the accuracy of the findings. In addition, analysis of the writing of the same children for a two-year period will provide longitudinal data in order to gain new insights into the development of the writing of young children.

This study provides a picture of the development of the composing process of a selected number of Papago Indian children from the third and fourth grades by analyzing samples of the subjects' writing which they produced in the regular ongoing classroom setting. The intent of the study is to extend understandings of writing development by studying relationships among the following variables:

Composing: A presentation and analysis of the subjects' concepts of composing (along with teachers' and researchers' influences on it) will be presented. Composing includes: precomposing experiences in the classroom; differences between assigned and unassigned writing; revision and proofreading activities; use of overt language during writing and about writing (including metalinguistic concepts); reading and rereading of the composition; use of resources by the teacher and/or the subjects during composing; and reactions to composing by the subjects and the teachers.

Orthography: Writers' compositions will be analyzed for developmental aspects of orthographic features which include spelling, punctuation, capitalization, spacing, directionality, and type of writing such as manuscript or cursive and letter formation. In addition the data will be analyzed to identify: use of resources which might aid developing orthography; use of overt language related to orthographic features; and writers' concepts of spelling, punctuation and other features related to orthography.

Syntax and Semantics: Writers' compositions will be analyzed for development of syntax as well as the semantic system of language. Syntactic features such as morphological units, word order, T-units, clauses, and phrases will be discussed. Selected aspects of semantics and pragmatics will be examined: textual cohesion, contractions, dialect, and metalinguistics.

Overt Behaviors: Data will be analyzed for overt non-verbal and verbal activity used by writers during writing. Specific categories such as interruptions, revisions, subvocalizations and resource use will be featured.

An overview of most of these variables across all subjects is provided in Chapter IV, where cumulative statistics and overall developmental findings are discussed. In addition, these variables provide major focuses for the case studies in Chapters VI-XI. We feel that both the cumulative data and the rich context which it derives from are important; the data in Chapter IV becomes far more meaningful when seen in light of the social and situational complexity revealed in the case studies.

CHAPTER II - CONTEXT OF THE STUDY

The Community and Children

The study takes place in the Indian Oasis Public School District, located entirely on the Papago Indian Reservation, about sixty-five miles west of Tucson, Arizona. The district covers an area of two million acres, or 3,000 square miles. Ninety-seven percent of the student population is Papago. Eighty-five percent of the students are bused to school, some as far as fifty-seven miles. Approximately fifty percent of the students live either in, or within ten miles of, the governmental center of the reservation. The remaining fifty percent live in villages scattered throughout the reservation. Villages may be as far as twenty miles apart. Within one village, homes may be separated by one to five miles.

The first year, the research was conducted at one centrally located elementary school in the district, where all the subjects were in the same third grade class. The second year, the subjects were in two classrooms in two different schools. Half of the subjects were in a specially organized pre-fourth grade at the same school the children went to for third grade while the others were in a fourth grade class at the middle school, eight miles away.

The subjects are Papago Indian third and fourth graders. In order to provide insight into the developmental range of writers in third and fourth grades, the subjects were chosen to represent three developmental levels based on teacher judgment with researcher corroboration: lower, middle, and upper. Ten subjects, at least three from each developmental level, were selected. This allowed for attrition and ensured an intact sample of at least two representatives of each developmental level at the end of the study. At the beginning of Year II of the study, seven subjects were available in the same school district. We kept the first year data on all subjects to be part of the general statistical analysis, while six students became the focus of in-depth analysis.

Naturalistic Research

This research applies naturalistic research techniques (Guba, 1967, 1982) to the collection and analysis of children's composing processes in classroom settings. Control by researchers is minimal in order to collect data as it is produced in the classroom setting in which it occurs.

> As a general premise, it is probably safe to assert that the best way to study process is to observe it directly, rather than to infer its nature from the known input and the observed output. When process is the issue, naturalistic inquiry seems to offer a more useful means for its study than does the experimental model (Guba, 1978, p. 25).

Naturalistic methodology provides a realistic view of the composing process in the classroom, especially when focused on a small number of subjects.

The information for this study has been gathered in depth and over an extended period of time. The variables that have been identified, and whose interrelationships have been viewed, will be stated as hypotheses for study with larger numbers of people. Simultaneous in-depth case studies on children in the same school environment provides valuable information not only on children but also on teacher-child transactions and environmental cues. The in-depth case study approach has proved to be a useful one for writing research. Emig (1969) utilized the case study concept in her research, "Composing Processes of Twelfth Grade Students," to gain in-depth understanding into the writing process. Utility of the case study method has also been demonstrated by Graves' study (1973) and Burrows' (1964). Recently, under Graves' direction, a research team from the University of New Hampshire has been observing the daily activity of young children (Graves, 1982, 1982a; Walsh, 1982; Calkins, 1983). Detailed data gathering through videotapes, audiotapes, direct observation and teacher-child interviews has pointed the way to discovering new observations previously unnoticed in the development of children as writers. Melas (1974) and Bodkin (1975) replicated Graves' 1973 study, and the findings with larger groups of children were consistent with the earlier case study findings. This study will confirm, disconfirm or expand on the findings of work by Graves and others, in order to make suggestions about the development of writing in third and fourth grade Papago students. Graves' research (1982) was conducted with rural white New England subjects. Much of the other research in writing has involved white populations in urban areas. These Southwestern Native American pupils, living a different life-style with a different educational history, will serve as a good contrast in examining and supplementing research on the composing process. Guba uses the term "triangulation" for the process of combining multiple data sources, research methodology, and theories (Guba, 1978, p. 64). The process of comparing the research of others with the research at hand provides internal validity, which Guba calls intrinsic adequacy for naturalistic inquiry.

> When a series of bits of evidence all tend in some direction, that direction assumes far greater believability. As statistical means are more stable than single scores, so triangulated conclusions are more stable than any of the vantage points from which they were triangulated (Guba, 1978, p. 64).

Emerging from the thousands of hours of observation, recording, and analysis of data of this study on third and fourth grade writers is an objective look at human behavior. As Graves (1980, p. 918) points out, "We can never forget that if information from one study is to be used in another site, with other children, the most thorough description of contextual factors must be given. When the process and context are described in simple, straightforward language, teachers will be ready consumers of the information." This report is an attempt to reach the goal suggested by Graves.

The Classrooms

Our study took place in three different classrooms, one third grade, one pre-fourth grade, and one fourth grade. Each teacher had her own individual style and philosophy about teaching and writing; the only commonality is that all provided time for writing on a regular basis. Although the researchers had many informal interactions with the teachers about writing curriculum and instruction, we basically took the classrooms as we found them, rather than attempting to influence them or to impose our ideas about the writing process. The classroom descriptions that follow are an attempt to give a sense of our research setting and are therefore non-judgmental in intent; that is, we are neither endorsing nor disavowing the teaching practices described, merely characterizing them.

Ms. Howard's Third Grade Class

The first year of our study took place in the district's primary school, which is located in the largest town and administrative center of the reservation. The school consists of all the kindergarten through third grade classes for the whole district, with about three classrooms at each grade level. The school has two large classroom buildings; during the two years of our study an addition with several new classrooms was constructed on the end of one of them. Some of the teachers live in the community and some commute daily from Tucson, some 70 miles away. The principal has lived and worked in the community for several years. Although most of the classroom teachers are non-Papago, other school personnel like the librarian and counselor are Papago, and most classrooms have a Papago aide at least part-time.

Ms. Howard was selected to be the teacher for the first year of the study on the basis of both a recommendation from the school principal and her agreement to participate. We concurred with both the teacher and the principal that she could handle the added responsibilities of the research project in her classroom because she had taught third grade for three years and had a reputation as a fine teacher. In addition, because Ms. Howard bases her instructional program on writing, students would be writing on a daily basis.

Ms. Howard could be classed as an "involved teacher." She knows and respects every one of her students as an individual with special needs and strengths. She is a hardworking and creative teacher and spends hours designing elaborate units, bulletin boards, etc. She believes strongly in the value of writing as an instructional tool, and in fact had her students writing "across the curriculum" for a variety of purposes and functions.

Ms. Howard sets up her instructional program using twenty-minute work periods. Students spend time at learning centers during the morning and part of the afternoon, leaving the rest of the afternoon for "sustained silent reading" and special projects and activities. In most cases the children work in groups on assigned tasks which they complete in the allotted time. There are times when one child might finish an assignment in five minutes and have to wait to move on to the next center, while another student might have to move on to the next center before he or she was finished. This time schedule had an impact on the students' writing since they often had to leave a piece unfinished or rush to finish it.

Once, based on our suggestions, Ms. Howard did encourage the children to write about a topic of their own choosing. However, since her instruction is so intimately tied to writing, she believes it is necessary to assign topics that are related to the unit the class is presently studying. Furthermore, she stated that she believes that assigned topics help children become better writers.

Ms. Howard directs the editing process of the children's initial writing, instructing her students to bring their completed first drafts to her for editing. Time permitting, she usually asks them to read their pieces to her first. Then together she and the child go back over the piece; Ms. Howard usually discusses and circles all misspelled words, incorrect syntax, punctuation, and other writing features. On occasion, Ms. Howard also spends an editing session helping the child express meaning more effectively. Towards the end of this first year of the study, she allowed some of the more capable students to handle their own editing. Once the editing is completed, the children know they are expected to copy the corrected first draft over on a new sheet of paper. Some stories are also made into bound books.

Ms. Howard also has a specified grading policy. Students are given a weekly grade for writing; at the beginning of the school year, the children had to produce a minimum of three stories and one "bound book" in order to obtain an "outstanding" grade that week. About mid-year, after Ms. Howard decided her original policy was too demanding, this policy was changed to two stories and one book per week.

Physical Environment

All ten subjects originally selected were in the same third grade classroom during Year I. The classroom is spacious, approximately twenty by forty feet, larger than the average size classroom. A pitched ceiling supported by concrete beams adds to the expansiveness. A row of large windows lines the south wall and they are partially covered by heavy green plastic drapes.

The students' desks are pushed together in groups of six and large tables provide space where students can interact and work together. The arrangement of the furniture facilitates student movement and interaction.

Bookcases protrude into the room, marking the boundaries of various learning centers which are organized, with the exception of the reading center, either on groups of desks or on large tables. There are eight centers in all: discovery, listening, art, writing, math, spelling, reading, and teacher's choice. The reading center is furnished with a shag rug and large stuffed pillows. Seven desks and chairs pushed together serve as the writing center, which is located in the southwest corner of the room. The writing topic of the week is often displayed on the bulletin board directly behind the writing center, and encyclopedias and dictionaries are close at hand on a special stand.

The teacher's desk is in the northwest corner of the room next to the storage closet and is covered with stacks of books and papers. Ms. Howard spends little time behind her desk, preferring to work with students in a center or to move around the classroom helping students in need.

The three bulletin boards in the room are used to display either individual student artwork or the instructional unit being worked on by most of the students in the class. As the units change, or a new holiday replaces one that had passed, the displays are changed. In addition, student artwork and all exceptional papers are taped to the wooden storage cabinets on the east wall.

Classroom Structure, Schedule and Curriculum

After a roll call and lunch count, a typical day begins with a teacher-directed, whole group discussion of the day's activities and lessons. During this time, Ms. Howard also often conducts special whole group lessons or shows filmstrips and movies.

Ms. Howard divides the students into six groups. She explains to the children that they are grouped that way not on the basis of ability but because "they worked well together." She includes at least one "top" student in each group. This student is then responsible for assisting the "slower" ones who may need more help.

The students move, as designated groups, from center to center, until they visit each center, usually four or five of them in the morning and the remainder in the afternoon. Every 20 minutes, an egg-timer bell rings, alerting the children that they have five minutes to clean up and to move on to the next center. At the writing center, students develop a sense of how long 20 minutes is and gear what they attempt to this constraint. Sometimes, when students want to complete a story before the time is up, they write quick conclusions rather than putting a story away unfinished.

Writing in the Classroom

Almost all classroom writing is assigned in Ms. Howard's room. The assigned topics evolve out of either holidays or instructional units. Thus the children wrote stories connected with each of the major holidays--Halloween, Thanksgiving, Christmas, Valentine's Day, and Easter, as well as special Papago events such as the rodeo and carnival.

Ms. Howard builds writing into her entire instructional program; hence the children experience writing in most of the major content areas: social studies, science, language arts and health. The social studies units during our year in her classroom included: the fifty states, early Papago life, life in Switzerland, and ancient Egypt. The major science unit centered on space and the nine planets, and the language arts units included fairy tales, tall tales, just-so stories, and haiku. In addition, there was one health unit concerned with fire and bicycle safety.

Assigned writing in Ms. Howard's room covers a variety of functions and ranges from narrative stories to letter writing to expository reports. The children were also asked to write in journals, but due to a lack of time, these were not continued. In addition, Ms. Howard devoted one unit to the Japanese poetry form of Haiku.

As a rule, Ms. Howard introduces a new writing assignment with an example. For instance, during the Tall Tales unit she read them stories about Paul Bunyan, Pecos Bill and John Henry, and then encouraged them to write similar stories about their favorite Tall Tale hero. On another occasion when the class was studying the nine planets, Ms. Howard told the children about an imaginary trip that she had taken in her spaceship and what she had seen out her porthole once she had landed. She then requested that they write a similar story using her story as a model.

After the initial introduction to a writing activity, the class as a group generates possible story titles which Ms. Howard writes in black letters on large sheets of tagboard. She then hangs these on the wall near the writing center. When the children arrive at the center, they usually take a few minutes to scan the list of titles before choosing one and settling down to write a story to fit their selected title.

For some of the units, Ms. Howard made elaborate bulletin boards and/or tagboard folders with pictures and lists of questions designed to stimulate the students' thoughts and writings. During the circus unit, for example, she created folders with colorful circus photographs with a caption under each picture such as, "You have run away from home to join the circus. Which circus act are you going to be?"

Ms. Caldwell's Pre-Fourth Grade Class

Four of the study's original subjects were in Ms. Caldwell's pre-fourth grade classroom in Year II of the study. They were in the same school that they were in during Year I of the study, which usually contains only Grades 1-3; fourth graders normally go to the intermediate school eight miles away. Ms. Caldwell's pre-fourth grade of 21 children contains those children whose third grade teachers felt they weren't ready for the more rigorous academic demands of fourth grade in the intermediate school. The plans were that all of the children would be in the fourth grade the next fall.

Ms. Caldwell was selected because the subjects were in her classroom. She was willing to participate in the study. She encourages students to write daily and believes that children writing daily is an important part of the elementary school curriculum.

Physical Environment

Ms. Caldwell's class moved to a brand-new classroom in November, 1982. Her room arrangement is similar to her previous room, although there was a period of transition with the normal disorder that accompanies moving. Ms. Caldwell's classroom is about 30 by 30 feet with windows all along one wall. A rug about six feet wide runs all along one long side of the room. The room contains 21 student desks which are arranged in groups. Part of the year the desks were in groups of four; later they were arranged in two larger groups. Two large tables also provide work surfaces, and several other tabletops provide storage space. The three bulletin boards in the room display both the teacher's exhibits and student work. There are a great many materials in the room, including hundreds of books, many kits, two encyclopedias, and six kinds of dictionaries at different levels of difficulty. The children are free to get materials as they need them and feel comfortable doing so. Wall charts relating to the writing curriculum are often present. For instance, in February there were reference charts illustrating the steps involved in editing and research, and punctuation and capitalization rules Ms. Caldwell used in her conferences and discussions with the children.

Classroom Structure, Schedule and Curriculum

Ms. Caldwell's schedule consists of several major types of activity which remain fairly consistent throughout the year. Every day, either at the beginning of the morning or after lunch, there is a free reading period of 20 minutes or so. The children spend this time reading silently or reading aloud to each other in small groups. The class works as a whole group for math and writing. A large chunk of the day is spent in small groups which move between four learning centers consisting of half an hour each. Since a major purpose of the groups is to provide for reading group time with the teacher, the children are grouped according to reading ability. The centers vary in content depending on what aspect of the curriculum is being covered. One group works on reading with the teacher, one group works with the classroom aide, one group usually does some form of writing, and one group is involved in some other non-teacher-directed activity. The group activities run the gamut from reading instruction to theme-related activities to language patterns activities. A classroom observation from 12/7/82 describes a typical morning in centers:

1. Writing center - kids are either copying their own most recent story over into a book or writing a new unassigned story.
2. Ms. Caldwell is conducting a round-robin oral reading group.
3. Ms. V (classroom aide) is reading a book to a group.
4. Word search - kids are looking in books for singular and plural words (defined for them by the teacher as "one thing" and "more than one thing"), and writing them in separate columns.

Expectations for the groups working independently are made clear and these sessions operate very smoothly.

The schedule as a whole is a flexible one which provides a predictable framework for a variety of activities but changes somewhat as necessitated by the curriculum and the children.

The pre-fourth grade class was originated this year as a response to the belief that there were a large number of third graders who were not ready for a regular fourth grade class in the intermediate school. Ms. Caldwell views the children in this class as having special needs and problems. As a result, her curriculum goals are somewhat different from those she would have for a standard classroom. Her primary goal for the year was to get her students to work well together as a class unit. As the year went on and she felt this goal was being accomplished, she devoted increasingly more energy to her second goal, that of getting the children "up to fourth grade level" in all areas of the curriculum. Another important goal, which is obvious in everything she does, is that of treating the children with affection and respect. The children are assumed to be interested in learning and in fact do feel that they are partners in learning with the teacher.

Ms. Caldwell's reading program is loosely structured around a basal reader series. She works with the children daily in homogeneous small groups, using whatever level of basal reader is comfortable for the children. These informal sessions involve reading the story, discussing it, and occasionally other activities like having the children write questions about the story for each other. As the year went on, the reading groups began to move away from the basals somewhat and to use more trade books. Reading also goes on during daily free reading periods and when the class is involved in research units.

Spelling and handwriting are taught sporadically. Ms. Caldwell uses spelling books occasionally with the class, primarily to have the children become familiar with them since they are a part of the intermediate school curriculum. In the fall, Ms. Caldwell spent some time teaching the lowercase forms of cursive handwriting to the class. Each child makes his or her own decision as to whether to use manuscript or cursive writing, with many of them switching back and forth between the two. Ms. Caldwell also planned to have another period of formal handwriting instruction toward the end of the year. One wall in the classroom holds a chart showing all the cursive letter forms; children refer to it frequently.

Science, social studies, and literature are learned through a thematic approach. The students are involved in discussion, reading, and writing, working in a variety of different groupings. Sometimes the whole class is involved in the same topic, but a science research unit allowed students to work on topics of individual interest. Ms. Caldwell has not given these curriculum areas her highest priority and is not trying to cover any specific content; she sees these areas as serving primarily as an avenue for language use. Math is taught conventionally, using a text book series.

Writing in the Classroom

Ms. Caldwell feels that her students are very interested in writing, and her curriculum takes advantage of this. Children usually write twice a day in Ms. Caldwell's classroom. During one of these episodes, the whole class writes on self-selected topics. During the first few months of the school year, the children would spend half an hour drawing and coloring pictures, and were then asked to write four sentences about their pictures. As the year progressed, Ms. Caldwell felt they no longer needed to respond in writing to a picture, so that this step was eliminated in November. The writing time is virtually always followed by a sharing time when many (and often all) of the children read their stories to the class. (One goal of this activity is to help the children feel more comfortable speaking in front of a group.) The time allowed for writing and sharing is usually about an hour, but runs longer if necessary. The sharing time is also used by Ms. Caldwell to answer student questions and suggest new directions for their writing. Some examples follow:

9/14/82 - Annie reads story to class. Somebody says "it's all one sentence." Gordon says "she didn't stop--there's no periods." Someone says, "It's all and. . .and. . .and." Ms. Caldwell reads story aloud--asks kids to raise hands where the periods are.

10/6/82 - Gordon's story is real long--Ms. Caldwell tells the class that Gordon finished early so she told him he could write "Chapter 2." Suggests that others can do the same if they finish early.

10/19/82 - Cathy got her picture idea and part of her text from a book, "The Magic Fish." Ms. Caldwell asks her where she got the idea--Cathy is reluctant to say because she thinks she should have used a more original idea, but Ms. Caldwell says "No, that's good!" and suggests that other people might want to read the book.

In addition to this kind of spontaneous instruction, Ms. Caldwell uses sharing time for instruction which is more highly planned but is also related directly to the children's writing. A classroom observation from 1/20/83 provides an example:

10/20/83 - Ms. Caldwell has the students tell her their story titles to put on the board; she then reads the list of titles with the class and so they can vote on the most interesting. Several combine two cultures - "The Day ET Saw Ee'toi," "The Day Ho'ok Fell in Love with E.T." The story with most votes is read aloud by its author (Ms. Caldwell uses this term "author") and everyone applauds. Before reading each story, Ms. Caldwell asks for predictions of story content based on title.

The group writing time is a lively one, filled with a good deal of informal interaction between children. As a result, the children get many ideas for topics from each other. For example, during September many of the children drew and wrote about the desert for days on end. Pac Man and E.T. also emerged as popular topics in the fall.

The children also write most days in a "creative writing" center. When Ms. Caldwell is discussing the day's centers with the class, she will often mention what they might choose to write about. Some days there are pictures or story-starters available, other days she asks or suggests that they write about a content-related topic. They also always have the option of writing on a topic of their own choosing. Again, if children have no ideas at first, they often get ideas through the small group interaction process.

Most of the children's stories remain in first-draft, unedited form. Some editing occurs on an episodic basis. For instance, the teacher occasionally meets with small groups to suggest what changes should be made in order to make a story into a book. A description of one of these group meetings was collected on 11/16/82:

11/16/82 - Ms. Caldwell is working with small groups with their writing. She asks them to read through their stories and pick the one they like best to make a book out of. As she goes through the story with Gordon, she asks him to tell where each sentence begins. As she does this, she asks Elaine and Abby to read stories to each other to see if they make sense. Gordon's story is in pretty good shape already. Elaine's has lots of invented spelling. Elaine reads her story to Ms. Caldwell, who asks her first if she used any Halloween words. Ms. Caldwell then has Elaine find "ghost" and "witch" on the Halloween chart. Ms. Caldwell and Elaine go through the first sentence together as Ms. Caldwell helps Elaine see where it ends, and helps her insert "went", which is needed for appropriate syntax. Ms. Caldwell has Elaine show where the second sentence starts and asks her what a sentence starts with. Elaine replies "a capital." Ms. Caldwell helps Elaine correct spelling of "started"--by listening to sounds--"ar" pattern (from "car"), and "ed" for the ending. Ms. Caldwell doesn't insist that all spellings be corrected but focuses on selected ones. "Sentence" is never formally defined but used in context--she talks about where it makes sense to stop.

Occasionally the teacher meets with groups for other purposes related to writing. For instance, if several children are having problems with capital letters, she may call them together to work as a group. She has also had a few sessions of peer editing, where she has met with groups and guided them in learning to be effective respondents to each other's work.

The classroom also contains wall charts which contain guidelines for writing that were developed and discussed in class. These guidelines often grew out of the children's own questions. The following chart is an example:

> Edit your story. Rewrite. Publish your story for
> others to read.
>
> Edit
>
> 1. Start your sentence with a capital letter.
> 2. Put a period at the end of each sentence.
> 3. Read your story to someone.
>   Do they understand it?
> 4. Check for spelling.
> 5. Write in your best writing.

To summarize, Ms. Caldwell's use of writing in the classroom can be characterized as being informal in tone although directive and purposive. The informality is evidenced in the children's freedom to choose their own writing topics with teacher support and suggestions when necessary and to interact freely while writing. Ms. Caldwell's direct involvement in the children's writing is also informal, but reflects her very definite goals for the children. Several of the classroom incidents described earlier illustrate her skill in taking advantage of naturally arising opportunities for learning; some of these are spontaneous and some planned, but all arise out of a sense of the children's current capabilities and interests. Sometimes larger units of instruction also arise directly from student needs, as this example from 2/3/83 illustrates:

2/3/83 - Ms. Caldwell has started a research unit which had come at the suggestion of one of the boys who had writer's block and needed something to write about. She introduced the idea of writing about real things they were interested in, so the kids got out resource material to provide information.

Writing instruction in Ms. Caldwell's classroom is always directly related to the children's own work; we have never seen her conduct a formal, out-of-context writing lesson.

Ms. Pagett's Fourth Grade Class

Three of the subjects from Year I of the study were promoted to grade four which is in an intermediate school eight miles from the primary school. Once a mission school, this campus-style facility now serves grades four through six for the entire district. This school is staffed by both nuns and lay teachers, and a nun serves as principal. The campus includes classroom buildings and an old stone building presently housing the school library and special reading room, a picturesque old chapel, and the cafeteria. There is also a small newly added modern building, where the principal and school secretary have an office. Because of the remoteness of the village, the campus also has a mobile home unit that is completely equipped with kitchen supplies and bedrooms. This serves as occasional housing for the several teachers who live 80 miles away in Tucson. They use it on nights when they are unable to return home due to inclement weather or evening school activities and when they wish to spend extra preparation time in their classrooms.

Ms. Pagett's classroom shares a building with the other fourth grade classrooms. The two classrooms are separated by a long narrow storage room. Researchers used this space for interviewing students and sometimes the subjects wrote in this room when a totally quiet environment was necessary.

Ms. Pagett is known as a teacher who encourages writing in her classroom. For this reason she was chosen to participate in the study and the three subjects were placed in her class. Her principal believed she would be a good teacher for the study and the researchers concurred with the decision. She agreed to participate.

Physical Environment

The rectangular one-story room features a natural brick interior with one entire side of windows. There are ample chalkboard and bulletin board areas. The class of about 27 students is arranged differently from time to time throughout the year. Some of the table-style desks and chairs are frequently arranged in small groups while others are separated in rows or off to one side. At the back of the room, there is a large table at one side which stores work materials, another large table with chairs which serves as an available work space for conferences and groups, and a large magazine rack stocked with "Ranger Rick," "Cricket," and other current children's publications. The upper walls frequently display teacher-made posters of words or phrases in the native Papago language, and the windows are decorated, changing according to the seasons of the year or other significant school events.

Classroom Structure, Schedule and Curriculum

In Ms. Pagett's classroom, adult-like self-controlling behavior is the stated expectation. "Assertive discipline" is the accepted procedure in the school. It includes a system of reward and punishment toward the achievement of this highly valued goal. The expectations which are discussed with the students frequently include little or no talking, self-regulation of an array of morning assignments, and quiet, on-task independent seat work. Ms. Pagett frequently expresses to the class her belief that they are capable of reaching her expectations, as well as her disappointments when they do not fulfill these expectations.

In the fall, discipline issues received a great deal of time and attention since Ms. Pagett believes that once the appropriate discipline is established, it becomes automatic. Consequently, there were occasions early in the year when little or no writing was done while researchers were there and therefore no data was collected. The frequency of writing tended to increase after Christmas vacation when classroom behavior was closer to the teacher's expectations.

A typical morning consists of a math lesson for the entire class. This teaching event is followed by the students working on up to four assignments listed on the board. One of the assignments typically is the follow-up to the math lesson. Often a dictionary skills, English or social studies lesson might be listed along with a writing assignment for that day. Students can choose the order in which they will complete the assignments with the knowledge that all of them should be completed by lunch time, which occurs at approximately 11:30 a.m. For students who do not complete their work, recess time is set aside.

Students are encouraged to raise their hands if help is needed. They are expected to talk as little as possible and requested to remain in their seats, although quiet talk and interactions are condoned and seldom interrupted.

Most subjects in addition to the math and writing assignments are taught as whole class activities. During the year, various social studies and science topics were evident. For example, one day growing plant molds were observed lined up on the back bookcase, carefully dated and labeled. One social studies lesson focused on the students' home, the Southwest region of the United States. Plants growing from seeds, weather pictures and model volcanoes were displayed at various times. Assignments reflect Ms. Pagett's recognition and appreciation of the significance of the Native American heritage and culture, which includes writing and reading Native American style legends and stories with a focus on the Papago.

Ms. Pagett occasionally played a game with her class which was a traditional old Papago game similar to soccer. Physical fitness is encouraged during recess, including a one-mile run in which she participated with the class. Ms. Pagett also read children's novels to her class; prior to the Arizona Young Reader's Award voting, the librarian also visited the class to read nominated titles.

Writing in the Classroom

Although Ms. Pagett is personally interested in and committed to writing, she frequently stated that her curriculum during the year of the study was hampered by discipline problems early in the year. She never accomplished some things that she had originally planned, including journal writing and conferencing.

All class members maintained correspondence with pen pals from another small Arizona community. Almost all writing is teacher-assigned, including stories from films shown to the class, creating stories from poster pictures and coloring imaginative designs with accompanying stories. The assignments are designed to give the students varied experiences in writing. Occasionally some of the assignments are edited and proofread. For example, the class wrote stories in preparation for a writing contest. Some of the students had work submitted to the contest and four students not involved in this study received awards of honorable mention.

Due to interruptions in the daily schedule for assemblies and other events, and attempts to get the best quality of video tapes, some data was collected outside the classroom by removing subjects from the classroom for short periods of approximately thirty minutes. The researchers utilized the storage room between the classrooms for this purpose. However the storage room had no electrical outlets and minimal lighting, making videotaping at that location difficult. The principal was helpful and provided a special education room which was not always in use in the library building. This area was spacious and well lit and became beneficial for making adequate video pictures.

Observations

The following field notes give a sense of what Ms. Pagett's classroom is like from one day to another.

11/10/82 - On this day, the neighboring fourth grade brings their chairs into Ms. Pagett's room and places them in available aisle spaces. The two classes view a silent film about a daisy that could not easily be picked. The students' attentive involvement indicates their enjoyment of the amusing film. As soon as the viewing is completed, the visiting class returns to their own room through the center storage room. Ms. Pagett's class has two follow up activities; one activity is to write a poem and the other is to retell the story of the film in writing. The three subjects in the study write lengthy accounts of the film that day.

1/26/83 - The class is quietly working and moving about the room as needed. The writing assignment for today is to respond to their pen pals. Some students are busy writing while others are using dictionaries to work on a spelling assignment. Just before going to lunch, Ms. Pagett reads to the class from an "E.T." book. Ms. Pagett initiates discussion of some vocabulary terms that come up during the reading and that she feels might be unfamiliar. The story reading and discussion continue until it is time to line up for lunch.

2/2/83 - In preparation for an area-wide writing contest that Ms. Pagett wants her students to enter, the class has been instructed to talk to parents, grandparents and other tribal elders. Ms. Pagett hopes that the discussions with their family and respected members of the community will motivate students to do some writing that reflects the Papago culture and heritage. The results include legend-style stories as well as accounts of aspects of the Papago way of life. The Native American topics continue for at least one week for a number of students and up to two weeks for others.

3/9/83 - The class has a new pet toad which they are very proud of. According to Ms. Pagett, this toad is a specimen of a rare species that lives only in the Northern Sonoran desert area near the Baboquivari mountains. The class later donated their special pet toad to the Arizona-Sonora Desert Museum. This donation is mentioned in a number of the subjects' stories.

The assignments written on the board today include an art activity. A recording of music by Vivaldi is playing quietly in the background during much of the morning. When Ms. Pagett starts the music she shares the name of the selection and its composer with the children.

Summary

We were fortunate to have the cooperation of three very different teachers during the course of the study. Although all the classrooms were similar in some ways, each teacher had a different curriculum focus for the year. Ms. Howard developed units which introduced students to a wide variety of content, Ms. Caldwell emphasized self-concept and social interaction, and Ms. Pagett stressed the land and culture of the Southwest. All three teachers provided regular time for writing, each using it in a way that suited her curricular goals and teaching style. We were thus able to see children's writing in a wider variety of contexts than would have been possible in any single classroom.

Other School Personnel

During the course of the first year, there were two paraprofessionals in Ms. Howard's classroom: Ms. Manuel, a Papago hired by the school district who worked in Ms. Howard's classroom on alternate weeks, and Ms. Lewis, also a Papago, hired to coordinate the research on site. Ms. Lewis was in the classroom on a daily basis and performed a variety of tasks for the writing project, which included manual observations of children at the writing center, videotaping their writing, photocopying their stories, accompanying a researcher during the parent interviews, and recording classroom observations in a daily journal, particularly observations related to writing.

During the second year two additional community members were hired as aides for short time periods All of the aides were supportive and provided us with valuable background information about our subjects and insight into the Papago culture and life-style. It was with their help that we were able, in changing the names of our subjects to protect their privacy, to invent names for the children which would be compatible with the culture. Ms. Lewis, who worked with us the longest, was especially helpful and had a major responsibility for the parent interviews during both years.

Ms. Alvarez is the principal of the elementary school used during Year I. Our association with Ms. Alvarez spans a period of four years. In 1978, as Title I Coordinator, she hired Drs. Kenneth and Yetta Goodman as consultants for a three-year inservice program. Thus many of the teachers at the school are aware of holistic language philosophies and methods.

Ms. Alvarez also appreciates the value of student writing. Furthermore, she believes that given the appropriate instructional experiences Papago children can write well. Ms. Alvarez has been a valuable participant in our study.

Ms. Brewer is the principal of the middle school. She was always supportive and interested in the ongoing data collection and analysis. She helped with the selection of a teacher and was always available for consultation and advice about her school or the children.

CHAPTER III - DATA COLLECTION

Figure III-1 Outline of Procedures

Data Collection at school site	Analysis at research site
I WRITING EPISODE OBSERVED Writing samples were collected whenever possible for each subject. Each collected sample was observed by researcher using Manual Observation Form. Original of writing sample was left with child, photocopy was kept for research files. Most writing samples were read by subject onto audio tape when it was finished or at end of observation period to be used for clarification if necessary.	Each writing sample analyzed by reseacher and prepared for computer coding. Analysis includes: 1) Composing 2) Orthography 3) Syntactics and semantics 4) Overt behaviors
II. WRITING EPISODE VIDEOTAPED 3-4 times a year, the above writing samples episodes were videotaped for each subject.	Each videotape was screened for verification of analyse of of overt behaviors and to use for in-service with teachers.
III. BI-MONTHLY INTERVIEW 3 to 4 times a year for each subject.	Each interview was transcribed to learn about student's view of writing including precomposing behaviors and metalinguistic knowledge.
IV. TEACHER BI-MONTHLY INTERVIEWS usually completed at same time as subjects' bi-monthly interviews.	Each interview was transcribed and analyzed to gain insights into teacher's view of the individual writer as well as writing in the classroom.
V. WRITING CONCEPTS INTERVIEW completed at the beginning and end of each year.	Each interview was transcribed and analyzed to gain insights into students' language use and knowledge about writing.
VI. PARENT INTERVIEW Completed the end of each year of the study.	Each interview was used to gain additional information about the subject and to provide communication with parents.
VII. DEBRIEFING NOTES	Notes were read and analyzed to provide supportive data for other analyses.

This chapter presents a complete description of the data collection procedures and each instrument used to analyze and categorize the data. The time schedule of data collection is also included. An overview of the procedures will be presented first. Then each procedure will be discussed in depth.

Overview of Procedures

Figure III-1, above, outlines the various procedures used for data collection and shows how the analysis relates to the data collection. The left-hand column defines each of the data collection episodes. The right-hand column is a short description of the way in which each procedure was used for analysis. Tables III-1 through III-4 summarize the amount of data collected. Table III-1 shows the number of data collection episodes for each procedure for all subjects for Year I; Table III-2 shows the same data for Year II, although by then only the 6 case study subjects remained in the study. Tables III-3 and III-4 show the combined data for each procedure for both Years I and II, for the 6 case study subjects and all 10 subjects respectively.The tables are followed by a discussion of each data collection procedure. Data analysis, the findings and conclusions are presented in Chapters IV through XII.

Table III-1
Summary of Data Collected: All Subjects - Year I

	Stories Observed	Concepts of Writing Interview	Bi-Monthly Interview	Parent Interview	Video Tapes
Elaine	19	2	3	1	3
Anna	22	2	3	1	3
Gordon	20	2	3	0	2
Rachel	18	2	3	1	2
Vincent	16	2	3	0	2
Dana	18	2	3	1	3
Mark	9	2	2	0	2
Mary	24	2	2	1	2
Jean	15	2	3	1	3
Mike	15	2	3	1	2
Totals	176	20	28	7	24

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Table III-2
Summary of Data Collected:All Subjects - Year II

	Stories Observed	Concepts of Writing Interview	Bi-Monthly Interview	Parent Interview	Video Tapes
Elaine	13	2	3	1	5
Anna	21	2	3	1	6
Gordon	23	2	3	1	6
Rachel	15	2	3	1	7
Vincent	13	2	3	1	7
Dana	17	2	3	1	8
Totals	102	12	18	6	39

Table III-3
Total of All Data Collected
Case Study Subjects - Year I and II Combined

	Stories Observed	Concepts of Writing Interview	Bi-Monthly Interview	Parent Interview	Video Tapes
Elaine	32	4	6	2	8
Anna	43	4	6	2	9
Gordon	43	4	6	1	8
Rachel	33	4	6	2	9
Vincent	29	4	6	1	9
Dana	35	4	6	2	11
Totals	215	24	36	10	54

Table III-4

Total of All Data Collected:All Subjects - Year I and II Combined

	Stories Observed	Concepts of Writing Interview	Bi-Monthly Interview	Parent Interview	Video Tapes
Elaine	32	4	6	2	8
Anna	43	4	6	2	9
Gordon	43	4	6	1	8
Rachel	33	4	6	2	9
Vincent	29	4	6	1	9
Dana	35	4	6	2	11
Mark	9	2	2	0	2
Mary	24	2	2	1	2
Jean	15	2	3	1	3
Mike	15	2	3	1	2
Totals	268	32	46	13	63

Writing Samples

Two or three researchers went to the same classroom weekly to collect writing samples on the selected subjects. Whatever the subject was writing in terms of the teacher's ongoing instruction was the object of the observation. This will be termed the literacy event. Sometimes, however, weather, school activities, schedule conflicts, conferences, testing and illnesses among other ongoing experiences in the lives of the subjects, teachers and researchers interfered with the weekly routine. Tables III-1 through III-4 provide an overview of the data collected for each subject for each procedure each year and of how many protocols were used for analysis.

While the researchers were on site they collected writing samples from the children based on whatever was part of the ongoing writing for the class. These writing samples which will be referred to as compositions or texts were photocopied to keep in the research files. Originals of the compositions were returned to the teacher.

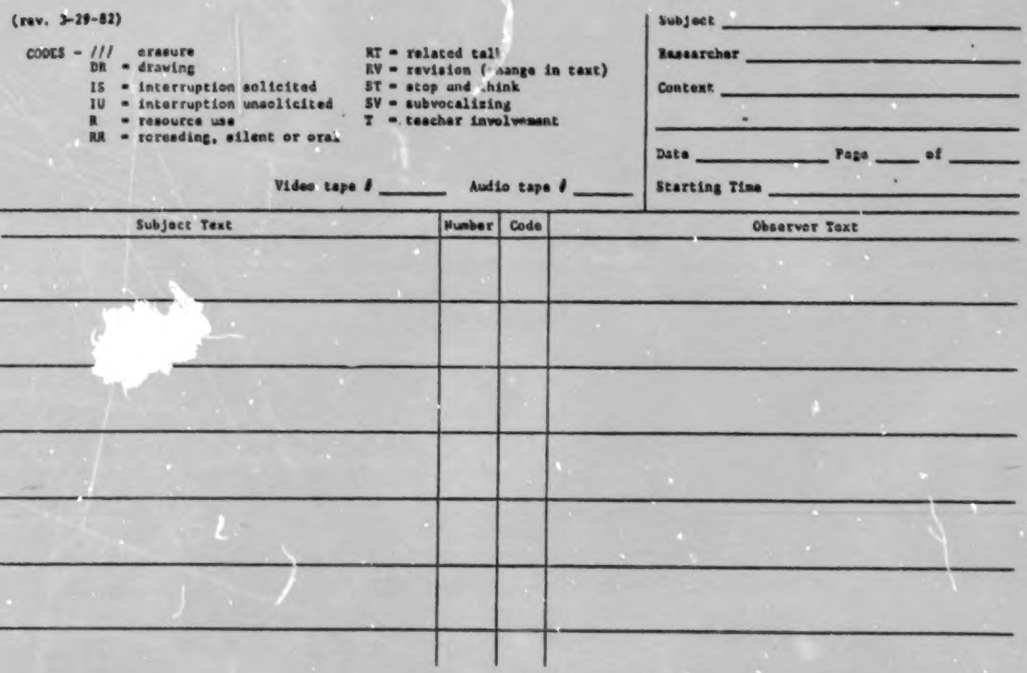
As the subjects wrote, data was gathered through researchers manually recording observations.

Manual Observation of Writing

Manual Observation Form Procedures

One of the principal methods of gaining greater insights into composing in this study was the observation of the subjects' writing during the regular writing time in the classroom. The form used to aid in this observation is the "Manual Observation of Writing" Form (MOF). (See Figure III-2.) Adapted from a form developed by Donald Graves (1975), the manual observation form used in this study represents a series of changes and revisions from the beginning of the study in Fall 1981 (See Appendix IIIA for earliest version and compare to Figure III-2 for the latest version). For example, the researchers initially attempted to number all words in the "subject text," annotating those numbers where behaviors took place. This system proved cumbersome and made it difficult to keep pace with the subjects' composing during observations. This resulted in numbering only the locations where behaviors occurred.

Figure III-2 Manual Observation Form



(rev. 3-29-82)

CODES - /// erasure
DR = drawing
IS = interruption solicited
IU = interruption unsolicited
R = resource use
RR = rereading, silent or oral
RT = related talk
RV = revision (change in text)
ST = stop and think
SV = subvocalizing
T = teacher involvement

Video tape # ______ Audio tape # ______

Subject ______
Researcher ______
Context ______
______
Date ______ Page ____ of ______
Starting Time ______

Subject Text	Number	Code	Observer Text

Another change from the earlier form included defining "proofreading" and "rereading" in different ways. These two items were listed separately on the earlier form but proved to be ambiguous, since both involved rereading in some sense. Therefore, "proofreading" behaviors were coded as "revision," to apply to situations where an actual change in the text was made, leaving "rereading" as the code to describe oral or silent rereading without revision.

A category called "related talk" was added; it seemed important to separate out for analysis those comments made by the subjects directly related to their writing during the writing event (e.g., "what will I write now?," "C-A-M-E, that's an 'm' here.), as opposed to interruptions unrelated to the subjects' writing such as the subject looking up and asking another child "Is it lunch time yet?" The latter were coded as interruptions. (See definitions of behaviors below).

Since the child's completed text was sometimes difficult to decipher because of features such as invented spellings, word omissions and cohesion problems, the researchers began a procedure of tape-recording the childrens' rereading of their own stories when they were finished writing or had to stop because of time schedules. The manual observation form thus contains spaces for cross-referencing audio (and video) data.

The researcher sits in close proximity to the writer, usually on the same side of the table and to the right or left, depending on seating arrangement and the handedness of the researcher and subject. The researcher copies the child's writing as the child writes, onto the manual observation form section marked "Subject Text" (See Figures III-2 and III-3). When one of the listed behaviors occurs (see upper left-hand section of form), the researcher places a subscript number at the point in the sequence of the text where the behavior occurs. The researcher continues to copy the subject text and number sequentially as each behavior takes place. That number, the appropriate code, and any accompanying explanation are listed on the section of the manual observation form labeled "Number", "Code", "Observer Text." Where possible, the researcher attempts to space words and sentences in the same way the subject has on his or her own paper. The time when writing begins and ends are noted. The researcher stops coding when the subject indicates that the writing is completed.

The researcher asks the subject to reread the completed composition, usually into an audiotape recorder. During this rereading, the researcher notes the conventional spellings for any invented ones on the "subject text" part of the form. The researcher also notes any written revisions the subject chooses to make during or immediately following the rereading, noting that these revisions were at the time of rereading and not during the earlier composing process. The child's completed composition is photocopied and filed with the manual observation form. Both items, along with the available audiotaped recording and any videotaping, are used to more accurately code this data for analysis. Every story analyzed has an accompanying MOF.

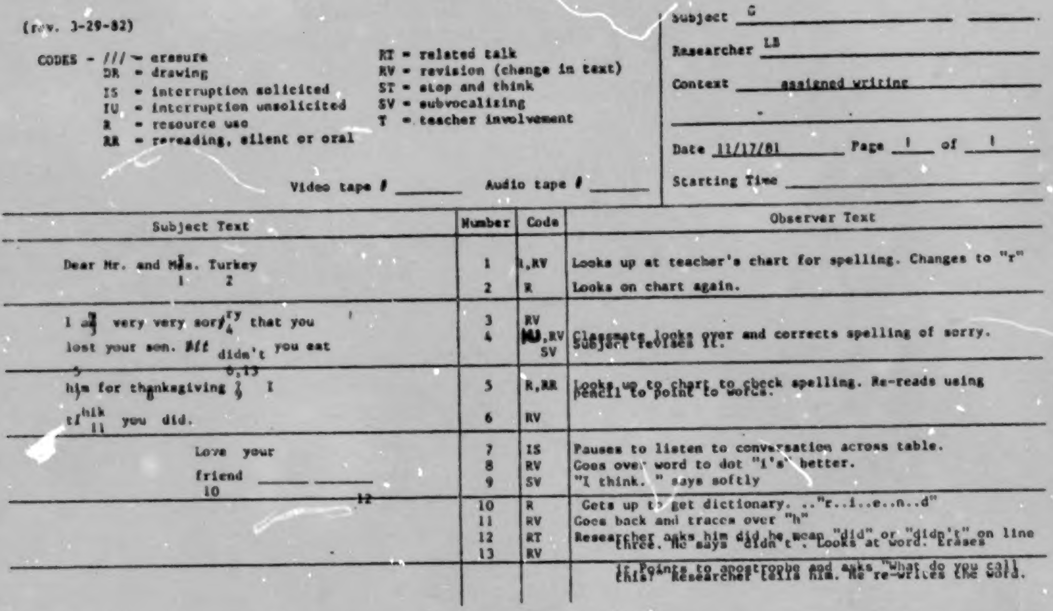
Coded Behaviors

The behaviors which are coded on the Manual Observation Form during data collection include:

1) Drawings (d) - any graphic design not part of the language.
2) Interruptions (i) - overt verbal or non-verbal interactions which do not seem directly related to the composition. They may include solicited interruptions which are those initiated by the subject, or unsolicited interruptions initiated by the teacher or peers and including such distractions as bell ringing or classroom commotion.
3) Resource use (r) - includes solicitations of spelling, ideas, or other feedback, related to the composition by the subject. Resources may be inanimate such as dictionaries, pictures, writing on boards, or animate human such as asking someone a question about the writing.
4) Rereadings (rr) - can be silent or oral readings of any part of composition initiated by the subject at any time prior to being asked to reread by the researcher at the end of the writing episode.
5) Related talk (rt) - comments or conversation (other than resource use or teacher talk) related to the writing the subject is doing or the writing process in general.
6) Revisions (rv) - any written change to the text, whether it is handwriting, spelling, or content. This is usually indicated by erasures or crossing-outs.
7) Stop and think (st) - Pauses without overt language during which time the subjects appear to be thinking about their composition.
8) Subvocalizing (sv) - includes rehearsing, sounding out, spelling out, and subvocalizing during the actual composing by the subject. This may include speech, whispering, or mouth movements of phrases, words, letters or sounds.
9) Teacher involvement (t) - any time the teacher and the subject are interacting directly related to the child's composition. Teacher's interruptions which appear not to be directly related to the composition would be coded under interruptions.

Figure III-3 is a copy of a manual observation form completed by a researcher in November of Year I. The assignment given by the teacher for this writing instructed the students to write a letter of sympathy to the parents of the turkey consumed for Thanksgiving dinner.

Figure III-3 Manual Observation Form for Gordon's Text 11/17/81



(rev. 3-29-82)

CODES - /// = erasure
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RV = revision (change in text)
ST = stop and think
SV = subvocalizing
T = teacher involvement

Video tape # ______ Audio tape # ______

Subject G
Researcher LB
Context assigned writing
Date 11/17/81 Page 1 of 1
Starting Time ______

Subject Text	Number	Code	Observer Text
Dear Mr. and Mrs. Turkey 1 2	1 2	R,RV R	Looks up at teacher's chart for spelling. Changes to "r" Looks on chart again.
I am very very sorry that you 3 4 lost your son. ~~Dit~~ didn't you eat 5 6,13	3 4	RV IU,RV SV	Classmate looks over and corrects spelling of sorry. Subject revises it.
him for thankgiving ? I 7 8 9 think you did. 11	5 6	R,RR RV	Looks up to chart to check spelling. Re-reads using pencil to point to words.
Love your friend ______ ______ 10 12	7 8 9	IS RV SV	Pauses to listen to conversation across table. Goes over word to dot "i's" better. "I think." says softly
	10 11 12 13	R RV RT RV	Gets up to get dictionary. .."r..i..e..n..d" Goes back and traces over "h" Researcher asks him did he mean "did" or "didn't" on line three. He says "didn't". Looks at word. Erases it. Points to apostrophe and asks "What do you call this?" Researcher tells him. He re-writes the word.

The researcher coded 13 separate behaviors during this 29 word composition. Wherever possible, the researcher elaborated on the codes to provide specific information. For example: Number 1 indicates that Gordon looked at a chart for help with spelling, marked as a resource (r). This is followed by a revision (rv) indicating that Gordon erased a D in the word MRS. and changed it to an R. Another resource use, #10, involved the dictionary. Gordon spelled out part of the word as he returned to his seat and started writing. Number 4 marked an unsolicited interruption (iu) which occurred when a classmate looked at Gordon's paper and corrected his spelling of SORRY, which Gordon then revised (rv). Gordon quietly talked as he was spelling the letters aloud (subvocalizing) during the revision.

Due to the researcher's uncertainty about the subject's text, the subject was directly questioned at the end of the writing (# 12) about a previous word. Their dialogue clarified that DIT was intended to be DIDN'T, after which the subject revised (rv) the word to the conventional spelling. Although the researchers never directly corrected any child's composition, there were times when the researchers' questions focused the subject onto something which the child then self-corrected. (In fact, taking a cue from Piaget's clinical approach, we tried to question the subjects about some of the things they were doing that we thought would provide us with significant data about the subjects' thinking.) The number 12 was inserted at DIDN'T in the subject's text to show the location of the revision itself. As Gordon wrote, he asked the researcher "What do you call this?" while pointing to the apostrophe in DIDN'T. This was marked as related talk (rt) and the researcher answered the subject's question.

Although Donald Graves and his associates did not use the manual observation form throughout their research, we found it valuable. Not only did we find this form helpful in our research, we believe it may have application for occasional teacher observations of students' composing. Teachers may find it useful to observe the composing process with more focus on the specifics of what a writer is doing. Use of the form not only helped us to focus our attention as researchers but also had an interesting effect on the students. They seemed to appreciate the attention we were paying to their writing, and the form was evidence to them of how important their writing was to us. They were aware of many details of our observation process, corrected us frequently, and they may even have written more in order to hold our attention. We were a very interested and obvious audience.

Video Data

Because of the lateness of time of notification and final funding for this study, delays occurred in obtaining video equipment and starting the video data collection. After taking time to determine the best type of video equipment for use in the classroom, there were normal purchasing delays so that the equipment did not arrive until mid-November of the first year. Considerable and necessary time was spent in training the staff for the appropriate use of the equipment, finding the best possible placement in the classroom, and orienting our subjects and other students in the classroom to its use while they were composing. Because of these logistical considerations and recurrent problems with adequate sound, we did not collect as many videotapes on each of the subjects as we had first planned, especially during the first year. (See Tables III-1 through III-4 above.)

Our major objective for the video data was to capture two important types of behavior which could not be as fully obtained through other types of data collection. The first category includes more specific information about those behaviors coded on the MOF which have an obvious relationship to composing such as sounding out, revisions through erasures, eyes focused on writing, rereading, and use of resources, as compared to those behaviors which are not obviously related to composing such as watching others, outside interruptions, giggling and talking, and intrusions by the video equipment. In addition we looked at physical behaviors such as the way subjects held pencils, the angles of their bodies in relation to paper, etc. We have had most success with recording those behaviors which are not reliant on sound. Most of the videotape data for this report was used to support other data analysis and is reported in each case study.

We recorded from two to eleven writing sessions on videotape for each subject (see Table III-4). Our in-depth subjects have more videodtapes than those who we did not carry over from the first year. The video data provides a fascinating record of the degree of pupil engagement with composing. The data gives us a clear indication of how involved and intent third and fourth graders can be while engaged in composing. Individual subjects respond differently to the taping situation, so we were able to get a less obtrusive, more complete picture of behaviors during composing for some subjects than others. In addition to using the video data to supplement and provide concurrent evidence for information gleaned from other observations, it will also be particularly useful in disseminating the results of this study to interested professionals. With this purpose in mind, we therefore also chose to videotape various interviews with subjects during the second year of the study.

Interviews

Regularly scheduled interviews were part of this study (see Figure III-1), including two different types of student interviews which are explicated below. In addition, interviews with teachers were scheduled regularly and interviews with parents were carried out once each year.

Direct observation of the writing event provides one kind of data. Interview data provides another view of a writer's cognitive and affective responses to writing. The writers have the opportunity to tell what they believe, what they know and how they feel about the many aspects of the writing process. Both the direct observation of writing and the interviews provide insights into the literacy event which could not be known from only one of these procedure alone.

The Concepts of Writing Interview

In order to gauge each subject's concepts of writing, spelling, handwriting, and audience, the Concepts of Writing Interview was administered at the beginning and end of each year in a one-to-one situation between researcher and subject. Every interview was audio-taped and transcribed for further analysis. A standard list of questions (See Appendix IIIB) was asked each time but the researcher expanded on each question in order to gain as much information about the subject's knowledge as possible.

The main purpose of this interview is to gain insights into the subjects' conscious knowledge about the writing process in order to relate conscious knowledge to the subject's language during composing as well as to the composition itself. All the analysis also infers the child's intuitive or tacit knowledge.

The concepts explored through the interview questions include the following:

> **Composing:** Students are asked what makes a good writer and a good piece of writing, and what a writer needs to know and do.
>
> **Handwriting:** Students are asked to discuss what makes handwriting identifiable and what makes it good.
>
> **Spelling:** Students are asked about how they go about spelling, what makes a good speller, and the importance of spelling.
>
> **Audience Concept:** Students are asked who will read their paper and how various hypothetical audiences would react to it.
>
> **Writing Genres:** Students are asked to distinguish between stories and other genres.

Bi-Monthly Interview

Roughly three times a year (See Tables III-1 and III-2), depending on the school calendar and the amount of data collected, subjects were handed folders containing copies of all their researcher-observed writing collected since the previous interview. After reviewing their compositions, the subjects were asked to rate them from best to poorest and to state a rationale for their ratings. The subjects were then asked to rate the papers as their teacher might, again stating a reason for their hypothetical ranking. In this way, both the children's own evaluative criteria and aspects of their sense of teacher expectations were assessed.

Although both the Concepts of Writing Interview and the Bi-Monthly Interview are based on Graves' original interviews, they have been revised and extended using knowledge gained from experience with the questioning techniques in miscue analysis (Y. Goodman and C. Burke, 1972; Goodman and Goodman, 1978), the Burke Reading Interview (1980); and the Goodman and Altwerger print awareness study (1981).

In addition, as we have listened to and transcribed the interviews, we have gained insight into our questioning procedures that enabled us to further revise and refine the interview questions. Specifically, we discovered ways to elicit more information from the subjects. To encourage subjects to continue their responses, we have learned to use longer than normal periods of silence after researcher's questions or subject's responses, or to just say "mmm" or "uh huh." When subjects pause in their response to a question, if the researcher asks "What else?" or "Tell me more" rather than phrasing a new question we get more complete and interesting information. "What else?" seems better than "Anything else?" When asked the latter, subjects have the opportunity to say, "No"; faced with, "What else?" they are more likely to volunteer additional information.

Teacher Interview

The teacher interview is patterned after the teacher interview that Graves used in his study, and parallels the bi-monthly student interview. After we had completed the subject's bi-monthly interview, we would undertake the teacher interview. The teacher read through the written work of the selected subject collected over the previous period and was asked to rank the writing. Once the rating was completed, the teacher was encouraged to talk about each piece, sharing background information about the purpose for the assignment, her personal reaction to the piece, and her insights into the student's writing ability and development. There was a sharing with the teacher of student's comments about each composition.

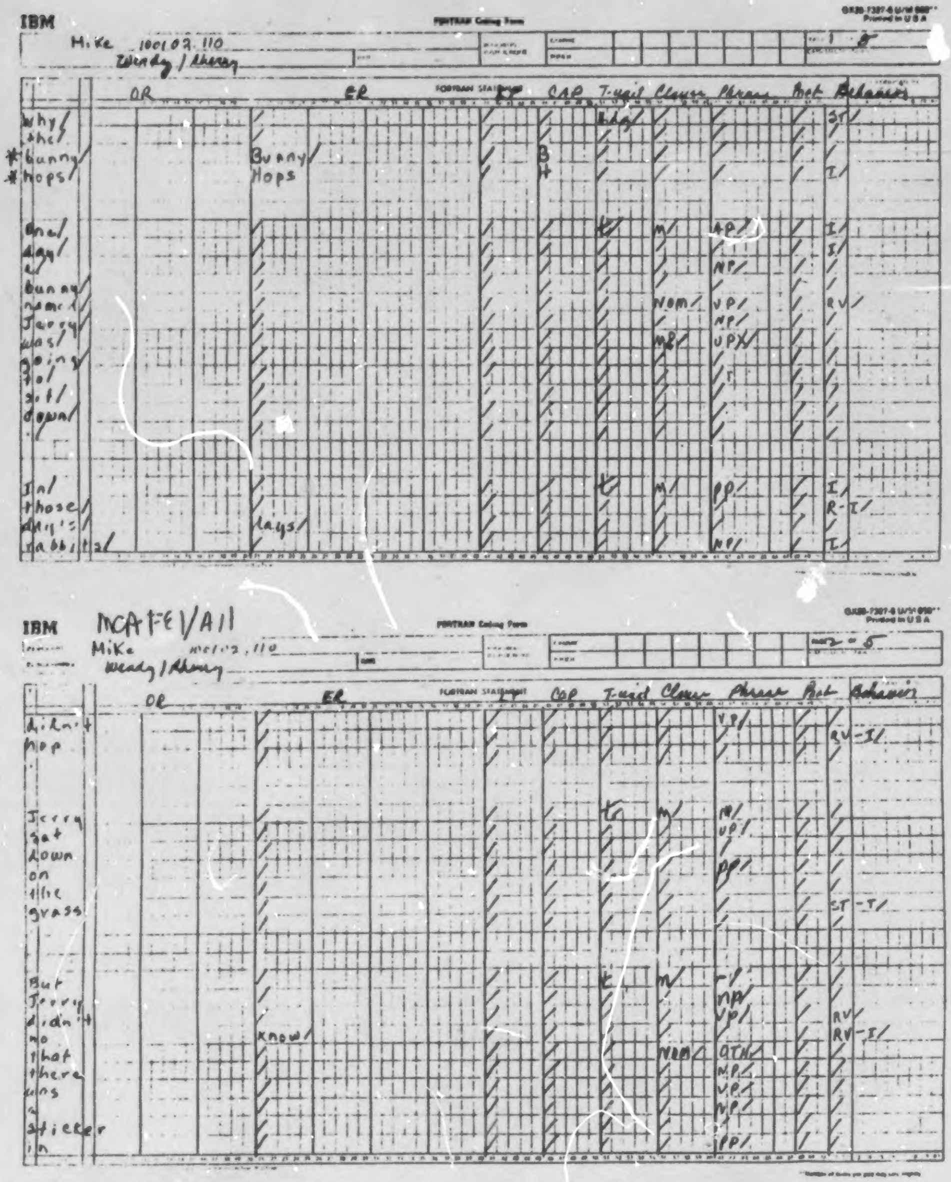
In addition to the regularly scheduled teacher interviews related to the subjects' compositions, we met with the teacher regularly to give both teacher and researchers opportunities to voice concerns or raise questions. It provided researchers with greater insights into the teacher's curriculum and how writing related to it, as well as to establish a more personal relationship between researchers and teacher. Data related to these more informal sessions was kept in a "debriefing" notebook and used to support other analyses and conclusions whenever appropriate.

Parent Interview

Using a parent interview format developed by Hausaler (1982) and revised and extended by the researchers, one of the researchers and the project aide interviewed six of the subjects' parents at the end of each year of the study. Three of the subjects' parents were unavailable for interviews at the end of Year I. All of the case study subjects' parents were interviewed at the end of Year II.

For the most part, the parents were very open and willingly shared information about the reading and writing activities that their children participate in at home. By meeting and talking with the parents, we are able to develop a more complete picture of the literacy activities that our subjects engaged in at home as well as gain insight into their life-styles and interests. It also served to give parents an opportunity to inquire about the research project and to establish rapport between a group of university researchers and parents.

Figure 1V-1 Mikes's Coding Sheets



IBM FORTRAN Coding Form

Mike 100102.110
Wendy / Sherry
1 5

	OR	ER	CAP	T-unit	Clause	Phrase	Behavior
why/				beg/			ST/
the/							
*bunny/		Bunny/	B				
*hops/		Hops	H				I/
and/				t/	M/	AP/	I/
day/							I/
a						NP/	
bunny/							
named/					Nom/	VP/	RV/
Jerry/						NP/	
was/					M/	VPX/	
going/							
to/							
sit/							
down/							
.							
In/				t/	M/	PP/	I/
those/							R-I/
day's/		lays/					
rabbits/						NP/	I/

IBM MCAFEE/A11 FORTRAN Coding Form

Mike 100102,110
Wendy / Sherry
2 5

	OR	ER	CAP	T-unit	Clause	Phrase	Behavior
didn't						VP/	
hop							RV-I/
.							
Jerry				t	M/	NP/	
sat						VP/	
down							
on						PP/	
the							
grass							ST-T/
But				t	M/	-/	
Jerry						NP/	
didn't						VP/	RV/
no		know/					RV-I/
that					Nom/	OTN/	
there						NP/	
was						VP/	
a						NP/	
sticker							
in						PP/	

Each area of data collection is analyzed to provide the relevant information related to the questions raised during this study. Each researcher-observed composition or student authored text and the interviews with the children were analyzed. Manual observation forms, video and audiotaped observations, and teacher and parent interviews were all used as supportive information to clarify and extend the interpretations of our findings. This chapter provides information about how the data is analyzed; and will present the longitudinal and cross-sectional data related to each area of analysis. Chapters VI-XI focus on the six children who became the subjects for the individual in-depth case studies.

Each overall area of analysis is categorized. Categories are based on our theory of the composing process, but throughout the discussion of the analysis, references are made to the changes we made to the category systems as the categories interacted with the real data. This is in keeping with naturalistic research methodology.

> The category system is a dynamic entity, constantly changing and, hopefully, improving. Collection, coding, and analysis of data go on concurrently as an interactive process (Guba, 1978, p. 54).

General Procedures

Each researcher coded all the data for the writing episodes of the students he or she later wrote up as in-depth case studies. This procedure provides the researchers with many opportunities to get to know the students well.

The coding procedures and the computer analysis procedures for all data collected follow.

1. The photocopy for each story selected for analysis was attached to the manual observation form and filed in a separate folder. The story was given a code number for computer use and listed on a Data Analysis Check Off Sheet for each child (see Appendix IVA).

2. The researcher coded the story onto an IBM Fortran coding form organized to facilitate data coding and analysis (Figure IV-1). In order to fit the format of the computer program selected for analysis, the researcher listed each word, space and punctuation mark separately in a column labeled OR (observed response). If the word, space or punctuation mark was conventional in form and appropriate to the context, the next column labeled ER (expected response) had a slash in it indicating that the expected or conventional response was the same as the observed response. If the expected response was different in some way, the response considered conventional was placed in column 2. For example in Figure IV-1 the first two pages out of five of Mike's coding shows that the ER's different from the OR's in this story were the spellings of DAYS and KNOW, and the capitalizations on BUNNY and

HOPS.

The researcher then coded each use, including substitutions, omissions, or insertions, of words and punctuation marks in the following seven categories:

Letter Formation - This flags the letter(s) on which letter formation problems such as reversals occur. Mike's LF column in Figure IV-1 shows no letter formation problems.

Capitalization - This flags the letter(s) where a capitalization problem occurs. Mike's CAP column in Figure IV-1 shows that he did not capitalize the initial letters of BUNNY and HOPS in his story title.

T-Unit, Clause, Phrase - These mark the beginning of each of these syntactic units in three separate categories. Mike's T-Unit column in Figure IV-1 shows that he had a heading or title and that he started four T-units. The clause column shows a main clause at the beginning of each T-unit. The first T-unit shows the nominative clause NAMED JERRY interrupting the main clause. The phrase column shows the phrases in each T-unit.

Problems and Behaviors - These last two categories mark the point where syntactic problems or coded behavior occur. Mike had no such problems in this segment of his story and exhibited 12 behaviors on the two page coding included in Figure IV-1. Each of the above catergories will be defined and the considerations related to coding discussed under behaviors later in this chapter.

When the story was completely coded, the researcher initialed the Data Analysis Check Off Sheet (Appendix IVA). The initialing signaled that the coding was ready for second checking.

3. Each original coding was checked by a second and different researcher following the same procedure used by the original coder.

4. The coding sheet was then entered into a microcomputer in order to transfer it to the main computer for analysis and to maintain a permanent file on disk. The printout from the microcomputer entry was checked by the original coder prior to its transfer to the main computer (Appendix IVB shows the overall procedures for coding and reformatting of data for Mike).

5. The original coded data was then reformatted by the computer to produce the following data:

a. A computer file was generated to display the coded data so it was easy to check and use for further analysis and discussion (Appendix IVA).

b. The story was printed out first as the child originally produced it (called the Observed Response Text) and then as it was adapted by the researcher to produce an Expected Response Text (Appendix IVB).

6. The original coded data was also reformatted to produce statistical data. (Example in Appendix IVB) These will be further explicated in the appropriate sections of the report.

a. Spelling data and statistics
b. Punctuation data and statistics
c. Capitalization data and statistics
d. Letter formation data and statistics
e. Syntactic data and statistics
f. Problem data and statistics
g. Behavior data and statistics

All other data collected and analyzed (videotapes, interviews, field notes and narrative scale) will be discussed as they relate to the findings in the following sections.

Provisions for Reliability

A simple statistical interrater reliability check was completed early in the study. However as work progressed it became obvious that certain categories were coded inappropriately by researchers, not because of differences in judgement but due to:

1) not remembering coding decisions, especially when changes took place;

2) too many complex decisions to be made at a particular point in coding which distracted researchers from following up on other simpler coding decisions;

3) lack of sophistication by some researchers about syntactic features such as when a clause is considered nominal or adverbial. (This ability developed over time with training.);

4) transcription errors which could have occurred at one of three places: when coding was transferred from the original composition to the manual observation form, from the manual observation form to the coding sheet, or from the coding sheet to the computer.

Therefore a set of multiple checking procedures were put into play in order to assure reliability.

1. Every Fortran coding sheet was completely double checked for every category by a different researcher. Any consistent errors or ambiguous cases were discussed with the original coder until understanding and consensus were reached.

2. After the secretary typed the data from the coding sheet into the microcomputer for storage, the printout was checked completely by one of the researchers. Any typographical errors were corrected. Any

other errors were discussed and/or remaining questions resolved.

3. As the data was reorganized by the computer program into various forms for further analysis, the printout was again checked. This would usually be done by the original researcher. First, the Expected Response text as printed by the computer was read which provided new insight into possible errors. (See Appendix IVB.) The reformatting provides a new format to examine the data which sometimes exposed coding errors not easily seen in the original printout format. Then errors and issues were again discussed and resolved, and errors changed whenever necessary.

4. As statistical analysis and combined data were generated another opportunity for correction was possible. This was usually done by the original researcher. The reorganization of the data provided opportunities to see errors not obvious in other formats. If statistics seemed questionable, checks were again made to see if the figures were affected by any errors.

Whenever an error was discovered or a question raised, the original data was changed appropriately if agreed on by the original and second checker. If these two people couldn't agree, a discussion was held with a committee of researchers and a final decision was then made.

Orthography: Analysis and Findings

with Sandra Wilde

Introduction

The orthographic system plays a role in the written version of a language similar to the role that the phonological system plays in oral language. For this research, the orthographic system has been defined as consisting of all the systematic visual aspects of written language such as spelling, spacing and other format, letter formation, punctuation, and capitalization. It has a relationship to the phonological system but is not a direct representation of it, since oral and written language use different media which have different constraints. Thus spelling is not necessarily a representation of pronunciation nor punctuation a representation of intonation. As a result, learning orthographic conventions is not a simple matter of one-to-one correspondence between phonemes and graphemes or intonation and punctuation. Rather, it involves understanding the need for and conceptualizing the workings of a system which expresses meaning in systematic but complex and subtle ways.

Recent research (for instance, the works of Read (1971 and 1975) and of Henderson and his colleagues (Beers and Beers, 1981; Beers and Henderson, 1977; Henderson and Beers, 1980)) confirms that children learn to spell through testing hypotheses about how the graphic system of English works.

Similarly, the uses of punctuation are not trivially defined or easily learned. The rule that a sentence begins with a capital and ends with a period cannot be applied mechanically since what constitutes a sentence is far from obvious. Children's mastery of punctuation, like that of spelling, is an evolutionary process.

Knowledge about these matters has significant applications to curriculum and instruction. Many traditional classroom practices are not supported by recently emerging knowledge about how children learn to write. Information about how development actually takes place suggests how schools can encourage and support that development.

Past studies have demonstrated that children's written language is a fertile source of data for information about their acquisition of the orthographic system. The data available for the present study have been collected from children at an age that is particularly interesting for these purposes. Third and fourth graders are using a variety of orthographic strategies. They have mastered the conventional spelling of many words, particularly high-frequency words. They use the phonic strategies that have been found in younger children, but also use strategies that reflect morphological rules of English (such as -ED endings and consonant doubling), and meaning relationships between words. These strategies produce both conventional and non-standard or "invented" spellings. Some words are "known" one day but must be re-invented the next.

Similarly, children at this age are increasingly using punctuation marks of all kinds in their writing, with varying degrees of conventionality. An example of the kind of behavior that helped us realize what a wealth of data we have in this area occurred one day when one of our subjects was writing about a football game. After some thought, he decided to write "foot ball" as two words, but with a smaller space than normally found between words, since "they go together." The next week he wrote "cup-cake" with a hyphen, and informed the researcher that two words that go together can be separated by either a small space or a hyphen, at the writer's discretion.

Current research has indicated that children's acquisition of reading and writing involves not rote learning but an active conceptualization of how written language functions. Ferreiro and Teberosky (1982) have shown how pre-school children develop and test hypotheses about the formal and orthographic features of written language as part of their very earliest experiences with it. Reasearch on the orthographic system of English has dealt with how it works and with children's acquisition of it.

Learning to spell has often been considered a trivial matter, involving rote memorization of words and rules. However, closer examination indicates that it is a complex and subtle task, due to the nature of the spelling system itself and the nature of language learning. Scragg (1974) shows how the complexity of English spelling can be traced though its history, which has been influenced by linguistic, dialectal, cultural and technological factors. Craigie (1927) offers a hundred-page analysis of spelling patterns of English words based on their language of origin. Despite this complexity, there have been many attempts by educational researchers to describe English spelling primarily in terms of phoneme/grapheme correspondences which could then presumably be taught as spelling rules. Hanna et al. (1966) developed a computer program which used phoneme/grapheme correspondences as a basis for a set of spelling rules. Given these rules and phonological representations of 17,000 words, the computer was able to produce correct spellings only about 50% of the time. Venezky's (1967) analysis of English orthography focused on graphemic patterns (such as diagraphs like "wh" and "ng") and grapheme/phoneme correspondences, and made clear the interaction of graphemic and phonological factors. Spelling is, however, related to meaning as well as to oral language; Chomsky (1973) illustrates the role of lexical spelling patterns which reflect not phonology but a deeper meaning level. (For instance, the "c" in "medicine" and "medical" represents two different pronunciations but signals an underlying semantic relation.) Spelling is influenced by phonology, morphology, orthographic patterns, and semantic systems. The patterns involved can to some extent be analyzed in terms of rules, but the rules cannot consistently be used for synthesis, to produce spellings, since there is so much variability involved. Smith (1973, 1982) suggests that spellers eventually learn to represent words directly, through integrated movement sequences. The young writer, however, will spell many words through mediated strategies, such as phonetic representation and knowledge of orthographic and semantic patterns. This concept of how spelling develops is supported by developmental research.

Read (1971, 1975) conducted an extensive analysis of pre-school children's spelling. He found that at very early stages of writing children were able to make phonological generalizations and express them in invented spellings, in patterns that are remarkably similar across children. Beers and Henderson (1977) found that first-graders' spellings reflected phonetic, orthographic, morphemic, and syntactic strategies, following a fairly consistent developmental pattern. Beers and Beers (1981) describe how this development is a matter of changing conceptualizations of the spelling system, and that invented spellings are reflections of a cognitive process. The studies reported in Henderson and Beers (1980) confirm and extend these findings. The stages observed by Beers and Henderson were statistically validated by a further study (Beers, 1980). Of particular interest for the present research is a study (Stever, 1980) dealing with dialect and spelling. Speakers of non-standard dialects were found, like other children, to represent their own phonology in their spelling and to quickly move beyond phonological strategies.

Bissex (1980), in a case study of her son, found that his development in spelling reflected his knowledge and understanding of the orthographic system. He saw spelling as a flexible system allowing for the generation of alternative forms, but also came to realize that conventional spellings exist and chose to attempt them more often. Woodley et al. (1983), in a study of second through fifth graders, observed a similar move towards conventionality. They observed spelling patterns common to this age group, such as alternative spellings of phonemes, and the involvement of homophones and bound morpheme patterns. Wilde (1982a) in a case study of one of the subjects of the present research, observed a similar variety of strategies. She attempted to pinpoint influences from Papago phonology, with inconclusive results. Hodges (1981) has summarized some of the instructional implications of research in spelling. He emphasizes that spelling is based in language use, and that strategies are learned holistically and as part of daily experiences with reading, writing, and proofreading.

Punctuation has been studied far less than spelling, but it develops in similar ways. Fries (1952) points out that the punctuation system serves a similar function to that of intonation but in somewhat different ways; it does not represent intonation directly. Klein (1916) points out that the primary role of punctuation is as a tool of meaning. Wilde (1982b) points out that the "phonetic fallacy" is no more true for punctuation than for spelling; both systems are in part related to oral language but also have direct relationships to meaning. Smith (1982) points out that punctuation can only be learned through experience with reading and writing; punctuation is even more subtle than spelling since there are no "punctuation dictionaries" in which to confirm correctness.

Only a few developmental studies involving punctuation have been conducted. Ferreiro and Teberosky (1982) found that pre-school children at first make no distinction between letters and punctuation marks (calling them all letters). Only gradually do they differentiate them and attempt to distinguish a separate function for punctuation marks. Edelsky (n.d.), in a study of first through third graders, found that children often used unconventional segmentation of words and punctuation. Through interaction with print, these patterns changed over time and became more conventionalized. Older children's non-conventional punctuation was more likely than younger children's to be text- and content-related. Bissex (1980) similarly found a movement toward conventionality; her son began by separating words with dots, then replaced this with spacing, and eventually used a variety of punctuation. Calkins (1982) found that the use of punctuation in classroom writing developed as a function of sense of audience. Growth as a writer led to using a greater variety of punctuation, and children in a classroom where much writing occurred could identify more punctuation marks than those from a classroom where direct teaching of mechanics was stressed. She hypothesizes that children in the writing-oriented classroom learned new punctuation marks incidentally, as needed.

This conceptually-based view of orthography is related to the meaning-based model of the reading process developed by Goodman (1982). Of particular interest is the concept of the "miscue," which is any deviation from the expected response in reading. A child who reads "If I ever join the circus..." as "If I ever join the curious..." has produced a miscue reflecting his or her use of the grapho-phonic, syntactic, and semantic systems of language. A child who writes the same phrase as "If I ever goyn the circus..." has produced an invented spelling which also reflects knowledge of language. Goodman describes miscues as "a window on the reading process"; invented spelling and punctuation are similarly useful as windows on the orthographic process.

Orthography: Analytic Procedures

The subjects' observed response (OR - exactly as produced) is analyzed on a feature by feature (word or punctuation mark) basis. The subject's expected response (ER - what the researcher believes is the intended production relying on convention in the written language) is also listed on a feature by feature basis. The observed response and the expected response have been compared by computer analysis. Final analysis for the orthographic information includes several types of word count for every composition, across compositions for each subject, and for all subjects. Invented spellings and punctuation differences are listed and counted as are letter formation problems and capital letter features.

A formula was devised t[illegible]etermine the percentage of appropriate punctuation found in each story. First, the number of conventional uses of punctuation is determined by taking the number of punctuation marks observed and subtracting the insertions and substitutions, both of which are coded as inappropriate use. This figure was then divided by the number of sites where punctuation was expected as well as those where it was inserted, so that the final figure shows actual conventional punctuation (that which was produced by the subjects) as a percentage of punctuation opportunities (i.e., where it either was used or should have been).

The formula is observed response minus insertions minus omissions divided by expected response plus insertions and is written as:

$$\frac{(\text{OR} - \text{insertions} - \text{substitutions})}{(\text{ER} + \text{insertions})}$$

There is no need to consider omissions in the formula since they are already left out of the OR figure and included in the ER's. An example of how this works can be seen by looking at one of Enna's stories written on January 20, 1983 which had 23 punctuation marks expected, 17 observed, 14 omitted, 8 inserted, and 2 substitutions.

These can be shown in tabular form:

Table IV-1 Punctuation: Elaine's Text 1/20/83

	Conventional	Omitted	Inserted	Substituted	Total
Observed	7	N/A	8	2	17
Expected	7	14	N/A	2	23

There are 31 occasions of punctuation in either the observed or expected text (i.e., 7 where it was conventional, 14 where it was omitted, 8 where it was inserted, and 2 where there were substitutions). Seven of these, or 23%, are conventional. The formula given above is a simplified method of producing this figure:

$$\frac{17 - 8 - 2}{23 + 8} = \frac{7}{31} = 23\%$$

Capital letter features include information about the failure to use obligatory capital forms such as those at beginnings of sentences, and for names and terms of address, as well as the use of capitals when inappropriate.

Letter formation problem entries provide information about:

1) reversals on the letter level
2) other non conventional forms such as uncrossed t's, and undotted i's
3) cursive letter forms which are not easily distinguished such as m's and n's
4) statistical cumulations of all the above.

Both letter formation problems and capital letters have been counted. For the former, a ratio between conventional and non-conventional forms has been established. Capitalization problems have been expressed in terms of number per hundred words.

Orthography: Findings

Spelling

Cumulative Data

Our subjects used 17,026 words in 278 stories over the two-year period of the study. Of those words, 14,578, or 85.6%, were spelled conventionally. The data base therefore includes 2,448 invented spellings (14.4% of the words), which are available for analysis. Comparisons between Years I and II will be made primarily on the basis of the six children for whom we have two years of data.

Between years I and II, all of the children except for Elaine showed an increase in percentage of conventional spelling. (In Elaine's case, this may be related to a decision on her part to put less emphasis on trying to spell correctly. This is discussed in her case study in Chapter VIII). The percentages involved, for each child and for all the children, are as follows:

Table IV-2
Percentage of Conventional Spelling: Years I and II

N=13,793 Words

	Year I	Year II
Elaine	80.8	78.0
Anna	82.6	85.4
Gordon	79.4	89.1
Rachel	85.2	86.2
Vincent	81.8	87.0
Dana	94.5	95.4
6 children	84.6	87.6

A test of significance of differences between proportions was applied to the figure for all 6 children; the increase was found to be significant beyond the .0001 level.

High and Low Frequency Words

There are 1 179 different words used over the two-year period. The 26 high frequency words make up only 2.2% of the different words used, but are used 9475 times and thus make up 43.9% of the total number of words used. These 26 words are spelled conventionally 97.5% of the time, over both years of the study, and this level of control remains very similar for both years of the study. In Year I, the 25 most frequent words were spelled conventionally 96.9% of the time; in Year II, the percentage for that year's 25 most frequent words was 97.3%. This suggests that these children entered third grade already controlling the spelling of the most common words in their written language.

In contrast, of the 692 words used only once over the two-year period (which make up 58.7% of the different words used but only 4.1% of the total words), there are 310 invented spellings, or 44.8%. Another way of stating this is that 310 invented spellings, (13% of the total) occured on 4% of words used, while only 185 invented spellings (or 7.6% of the total) occurred on words making up 43.9% of all text. The very low-frequency words were 18 times as likely to have invented spellings as the high-frequency ones.

These results are, of course, not unexpected. It makes sense that children are more likely to know how to spell words that they use more frequently and that they won't know how to spell words that they haven't used before. If childen are continuing to grow as writers, to explore new topics using new vocabulary, they will continue to have a certain percent of invented spellings. A child who always spells perfectly is likely to be a child who is not taking very many risks.

Table IV-3 shows the 26 words which were used 100 or more times during the two years of the study.

Table IV-3 High Frequency Words: Years I and II

	Frequency	Conventional	Invented	Percent Conventional
the	1,227	1223	4	99.67
and	686	679	7	98.98
I	594	594	0	100.00
to	585	581	2	99.32
a	479	478	1	99.79
was	478	475	3	99.37
he	311	309	2	99.36
went	267	248	19	92.88
we	240	240	0	100.00
it	238	227	11	95.38
in	211	211	0	100.00
one	199	197	2	98.99
then	195	186	9	95.38
day	192	191	1	99.48
they	180	163	17	90.56
is	149	148	1	99.33
said	149	110	39	73.83
got	147	136	11	92.52
my	147	147	0	100.00
when	125	116	9	92.80
his	123	113	10	91.87
of	119	111	8	93.28
on	116	114	2	98.28
she	110	109	1	99.09
there	108	91	17	84.26
but	100	91	9	91.00
Total	7475	7288	185	97.50

Patterns in Invented Spelling

The 2,448 invented spellings produced by the children during the two years of the study are a rich data base for exploring children's use of linguistic systems in using the orthography of English. A detailed analysis of all the invented spellings will be the subject of further work with this data base; for the purposes of this report, several patterns of development that have emerged from the data of third-and fourth-graders will be described and exemplified but not analyzed in detail. It should be noted that examples are given to illustrate a particular feature but not to suggest that any single invented spelling has a single cause. Invented spellings are the result of many linguistic systems interacting at once.

Initial Letters

Part of learning how to spell involves learning about the relationships between phonemes and graphemes; i.e., how different sounds are spelled. Looking at how successful children are at spelling the initial letters of words gives a sense of how much control they have of this aspect of spelling, since the beginning letter of a word is most likely to have relatively clear-cut relationship to the corresponding phoneme. Out of the 17,026 words written by our subjects, only 153, or 0.8%, did not begin with the correct initial letter. In Year I, there were 97 of these, or 1.1% of all words written that year, while in Year II they had dropped to 56, or 0.7% of all words. (A table showing all of these spellings appears as Appendix IVC) Seventy-eight of the 153 spellings (51.0%) occurred on words beginning with vowels, although only 24% of all words used began with vowels. This reflects the fact that consonant phonemes are much more regular in their spelling than are vowel phonemes. This data shows that these third-and fourth-graders clearly control initial letter spelling almost perfectly. Looking at a few examples illustrates that even when they don't they are often making plausible rather than random decisions about what letter to use first. (In these and other examples, invented spellings are listed first)

olmost/almost
roms/arms
pring/bring
who/how
gest/just
nife/knife
know/no

The A in ALMOST represents the phoneme /ɔ/, which is usually spelled with an A when before L, but is closer in sound to the phoneme usually represented by O. The R at the beginning of ARMS may be representing the name of the letter rather than just the the consonant phoneme it usually stands for. P (in PRING) is related both phonetically and graphically to B. WHO contains the same letters as HOW, has a related meaning, and both often occur in initial sentence positions and as question markers. When G occurs before E (gest), it is pronounced the same as J. In NIFE and KNOW, a silent letter is being dropped or added, each word following the pattern the other one should have.

Reversals

Our data includes many invented spellings where the order of two or more letters is changed. These reversals may be one element of invented spellings that differ from the conventional ones in other ways as well, but often they are the only invented feature of a spelling:

baesball/baseball
frineds/friends
siad/said
upno/upon

It seems that in these cases the child had a good sense of what letters are in a word but does not control the word well enough to always get the letters in the right order.

Long Vowels and Consonants

Two kinds of orthographic patterns that are less fully controlled by third and fourth graders are consonant gemination (doubling) and long vowel spelling. In both cases, the pattern is a complex one that must be learned gradually through experience with reading and writing. There is no simple rule that tells when a consonant should be doubled or how a particular long vowel should be spelled. The children have invented spellings that go in both directions. They sometimes use a single consonant or vowel where two are needed:

stacked/attacked
hamer/hammer
prety/pretty
dreming/dreaming
mett/meat
rel/real

They also, although less frequently, do the reverse:

hiss/his
mett/meat
untill/until
sowe/so
truy/try

Morphemic Affixes

Another important area of orthographic development at this age is the spelling of morphemic affixes like ED and ING. The child must learn to abstract these common morphemic elements from words where their representation differs phonologically, and then learn the orthographic patterns for attaching these affixes to words. In our subjects, we see invented spellings of various types related to these affixes:

Failure to generalize:
burnt/bounced
calld/called
opend/opened

Limited contol of orthographic patterns for adding affixes:
caryed/carried
chaseing/chasing
freezeing/freezing
hoped/hopped

Overgeneralizing affixes to words that don't have them:
playing/plain
roned/round
sied/said

Real Words

Another important pattern of invented spellings that we observed frequently in our subjects is the use of one real word for another. Third-and fourth-graders have a considerable and increasing vocabulary of words whose spelling they control; when one word is substituted for another it may be an attempt to have a spelling that looks like a real word. In the case of homophones, there is of course likely to be a phonetic influence:

herd/heard
no/know
maid/made
pries/prize
to/too (this occurs 35 times)

But even more of these spellings involve words that are similar phonetically but not identical:

bake/back
cake/chase
pound/pond
quite/quit
turk/truck

Punctuation-related

The subjects also have invented spellings where they use or fail to use punctuation features like apostrophes and hyphens. Writing a single word (usually a compound) as two words and vice versa is a related pattern. Examples include:

alot/a lot
a nother/another
bird's/birds
bu't/but
cant/can't
cup-cakes/cupcakes

Complexity of Invented Spelling

One of the most important conclusions apparent from this large data base of invented spellings is the complexity of the linguistic systems which the children use in producing them. Although one can never know exactly what was going on in the child's mind, the spellings themselves suggest what influences may have been operating. Looking at particular words across several children shows both the variety of these influences and recurrent patterns.

BECAUSE

The word BECAUSE was used 49 times, of which 15 were invented spellings used by 4 different children:

be cost
becues
bern
besuse
beaced (3 times, 1 subject)
becouse (2 times, 1 subject)
becuse (6 times, 3 subjects)

Some of the influences which one can pick out are phonetic (U for short U in BECUSE); orthographic (knowing 2 vowels are needed for short U in BECOUSE): reversals (BECUES); morphemic (using the common ending ED in BEACED); and punctuational (separating off the separate word BE in BE COST). It should also be noted that one cannot fully account for every feature in every spelling; a spelling like BERN is hard to explain (although the first two letters are conventional.)

EVERYBODY

The word EVERYBODY was used 9 times, including 6 different invented spellings by 5 different children. These spellings vary a good deal in their sophistication (These are not arranged chronologically; they come from different children at different stages of development):

aver,booy
arey botae
over body
ever body
evrybody
every body

The first of these spellings is the most divergent from the conventional, although it still has 6 of the 9 letters correct and in the right order. AREY BOTAE appears to be at least in part an attempt at a phonetic representation of the word as pronounced in the child's dialect. The remaining spellings all show control of the morpheme BODY and they get increasingly closer to the conventional spelling, with the last one differing from it only in its spacing. These examples clearly show that considering a spelling as merely conventional or invented is an oversimplification; spellings lie on a continuum, with some having far more invented features than others.

PEOPLE

Our subjects used the word PEOPLE 69 times, including 27 invented spellings by 7 different children:

papagole
pelanp
peole (2 times, 1 subject)
peopel
peopol (2 times, 1 subject)
peple (3 times, 2 subjects)
pepole (2 times, 2 subjects)
poelp (3 times, 2 subjects)
poeple (9 times, 3 subjects)
poleo (2 times, 1 subject)
poleopl

A striking feature of these invented spellings is that except for two of them, all contain only the four letters P, O, L, and E that actually occur in PEOPLE. Some of the spellings seem to be using more of a phonetic strategy than others (PEPLE as opposed to POLEO), while others use orthographic information: the most common invented spelling, POEPLE, reverses the very unusual vowel sequence EO.

Punctuation

Cumulative data

Our subjects had 2,894 punctuation opportunities (i.e. places where they either used punctuation or should have) over the two-year period. In 1,467 of those instances, or 50.7%, it was used conventionally. Our subjects thus control punctuation to a far lesser extent than they do spelling.

All 6 case study subjects showed an increase in percentage of conventional punctuation from Year I to Year II. The percent for each child and for all 6 children are shown in Table IV-4.

Table IV-4 Percent of Conventional Punctuation: Years I and II
N=2414 punctuation opportunities

	Year I	Year II
Elaine	21.1	31.7
Anna	48.1	73.1
Gordon	35.0	46.1
Rachel	41.5	42.6
Vincent	28.2	64.1
Dana	73.5	83.3
6 children (average)	42.7	57.5

A test of significance of differences between proportions was applied to the figures for all 6 children; the increase was found to be significant well beyond the .0001 level.

Comparisons Between Years I and II

For the sake of consistency, all comparisons will be made on the basis of the 6 children for whom we have two years of data. The primary reason that percentage of conventional punctuation increases from Year I to Year II is that omissions decreased dramatically, as shown in Table IV-5.

Table IV-5 Punctuation Categories: Years I and II*

	Conventional	Omitted	Inserted	Substituted	Total
Year I	450	520	55	28	1,053
	42.7%	49.4%	5.2%	2.7%	
Year II	783	479	66	33	1,361
	57.5%	35.2%	4.8%	2.4%	

*Six subjects only

In Year I, punctuation was omitted nearly half the time, while in Year II omissions dropped to a bit more than a third of the total. Insertions and substitutions were never numerous to begin with. Although they did diminish they did not affect the overall percentages very much.

There were opportunities for use of 7 different types of punctuation marks during the two-year period. Their patterns of use are presented in Table IV-6 arranged in order of frequency.

Table IV-6 Punctuation Types: Years I and II (6 subjects)
Number of Opportunities

	Year I	Year II
Period	781 (72.2% of total)	936 (67.1% of total)
Comma	125 (11.6%)	217 (15.6%)
Quotation Mark	137 (12.7%)	184 (13.2%)
Question Mark	26 (2.4%)	43 (3.1%)
Exclamation Mark	5 (0.5%)	11 (0.8%)
Colon	3 (0.3%)	3 (0.2%)
Semicolon	4 (0.4%)	0 (0.0%)

The totals of all punctuation types add up to more than the totals in Table IV-6 above since substitutions are counted under both the expected and observed punctuation type, e.g. as both a period and a comma opportunity. In both years, periods made up more than two-thirds of all punctuation opportunities, but in Year II the subjects were using an increasing number of text structures which required punctuation other than periods. They also showed increasing control over most types of punctuation, as Table IV-7 indicates:

Table IV-7 Punctuation by Types: Years I and II (6 subjects)

	Year I	Year II
Period	52.1% conventional	71.4% conventional
Comma	16.0%	23.5%
Quotation mark	9.5%	18.5%
Question mark	11.5%	55.8%
Exclamation mark	80.0%	54.6%
Colon	0	0
Semicolon	0	0

The five punctuation types used most frequently all increased in conventionality of use from Year I to Year II. Since periods accounted for nearly 70% of all punctuation opportunities, the overall increase in conventionality was largely due to increasing control of periods. The only punctuation type that went down in conventionality was the exclamation point, which is perhaps more open to interpretation in its use than some of the others.

It should be noted that the increasing control of punctuation that our data indicates took place largely in the absence of formal instruction in its use. However, all teachers discussed punctuation as it seemed necessary to them with individuals in conferences or with the whole class. Punctuation is clearly an important area of growth in the elementary school years. Some of the case studies (particularly Elaine's, Chapter VIII) illustrate the process by which it took place.

Capitalization

Our 6 case study subjects had a total of 600 capitalization problems, or 10.05 per hundred words, during Year I. This went down to 455, or 5.82 per hundred words, during Year II. The two-year total for all 10 subjects is 1,321, or 7.76 per hundred words. The 6 subjects, therefore, went from having approximately one capitalization problem every 10 words to having only one every 17 words. Although the 6 subjects varied quite a bit, they all showed a decrease in number of capitalization problems, as Table IV-8 indicates:

Table IV-8 Capitalization Problems per Hundred Words

	Year I	Year II
Elaine	16.5	12.2
Anna	6.6	4.5
Gordon	14.0	8.5
Rachel	14.0	8.5
Vincent	8.5	3.3
Dana	3.31	1.2

In Year I, 398, or 66.3% of the total, represent failure to capitalize letters that should have been, while the remainder are inappropriate capitalizations. In Year II, 371, or 81.5%, represent failure to capitalize. These capitalization problems are often a result of failing to either punctuate or capitalize at sentence boundaries but also include failure to capitalize story titles and proper nouns as well as many idiosyncratic capitalizations of nouns and other words. This data will be further explored in later research.

Letter Formation

Letter formation problems are minimal for all subjects. There were 60,624 letters produced with 200 letter formation problems. (See Table IV-9) Therefore there were letter formation problems on only .3% of all letters for any one subject and for all subjects combined over the two year period. All but two of the problems are categorized under two major types of problems: cursive formation of specific letters and the reversals of specific letters.

Table IV-9 shows which letters caused problems for all subjects, the amount of occurrence during the two year period and which were cursive or reversals. Two letters other than the cursive or reversal problems include one lower-case i which was left undotted and one capital T which was left uncrossed. When the letters in the table are in capital form, the problem was a capital letter; when the letters are in miniscule the problem occurred on a small letter.

TABLE IV-9
Letter Formation Problems: Years 1 and 2

Manuscript

letter	no.
B	1
D	1
J	1
a	4
b	28
d	31
e	2
g	2
h	1
m	1
n	3
p	2
r	2

TOTAL	78

Others

T (uncrossed)	1
i (undotted)	1

	2

Cursive

letter	no.
E	2
H	1
I	5
U	1
W	11
b	10
f	1
K	1
l	1
o	1
m	26
n	7
o	3
p	5
r	5
s	3
t	1
u	21
v	2
w	11
y	1
z	1

TOTAL	120

total letter formation problems 200
total letters produced 60624
percent of letter formation problems 0.33%

Cursive

Cursive problems occurred for most of the subjects as they first started using cursive writing. In American schools cursive writing is usually introduced sometime in the second or third grade. The Indian Oasis School district doesn't have a specific policy on cursive writing although they seem to follow the national pattern. Each of the teachers in our study had a different policy on cursive writing. Ms. Howard encouraged all students in her third grade class, including all of our subjects during Year I, to use cursive, especially toward the end of the school year. She occasionally set up a cursive writing center where each child was supposed to write in cursive. Everyone but Mark wrote something in cursive by the end of March the first year and Jean produced cursive writing as early as February 9th of year I. Table IV-2 shows the date on which each child used cursive for the first time.

Ms. Howard occasionally showed all of the children some aspects of cursive writing but there was no specific handwriting program which was presented to all the children at one time. She helped individual children as they needed it. Ms. Caldwell individualized her encouragement of cursive writing. She encouraged those children who she thought were in control of their writing to use cursive. However, those children who were still laboring over writing were allowed to use whatever written form they were most comfortable with. She gave individual help in cursive writing to children as thuy needed it. Ms. Pagett asked all children to write in cursive all the time and also gave individual assistance as she believed the children needed help.

Table IV-10 presents the number of texts written by all the subjects in manuscript and in cursive.

Table IV-10 Writing in Manuscript and Cursive:
Years I and II

	Year I		Date cursive first observed	Year II	
	m	c		m	c
Elaine	18	1	3/4/82	13	0
Anna	19	3	3/4/82	18	3
Gordon	18	2	3/30/82	17	6
Rachel	17	1	3/30/82	5	10
Vincent	11	4	4/27/82	1	10
Dana	16	2	2/16/82	1	16
Mark	9	0	None	NA	
Mary	21	3	3/30/82	NA	
Jean	15	5	2/9/82	NA	
Mike	14	1	3/30/82	NA	

For most of the subjects more texts were written in cursive during Year II than Year I although all students still produced manuscript texts in Year II. What is interesting to note is that once a student elected to write a story, letter or report either in manuscript or cursive the whole text was written in the same script. In almost all cases the students, even in their earliest attempts at cursive, stayed with the same form throughout a single piece. The only exceptions were in the cases of titles or endings to letters and stories and one story that Vincent wrote using manuscript on the first two words and then cursive throughout the rest of the text. From an examination of the texts it seems obvious that the transition from manuscript to cursive for this group of subjects was easy and caused few problems for any of the children. Those few problems were insignificant and became nonexistent over the period of time that the children wrote.

Cursive problems on capital letters occurred less than problems on small letters. (See Table IV-9) Only E, H, I, U, W were problems over the whole two year period. Only E and I occurred more then one time for any of the subjects and these occurred early in the subject's use of cursive. Each of these problems disappeared by the next piece of writing in which the same capitals were used in cursive. Cursive letter formation problems on small letters contituted a larger amount than on capitals but still can be considered insignificant.

In most cases, any one letter caused a problem for one subject only one time. However lower case cursive M will receive a bit more focus since it elicited the highest incidence of problems. Our breakdown of the total number of letters used by all the subjects was not separated according to manuscript or cursive use so a true percentage figure of manuscript and cursive problems for each subject is not possible. However, in the second year of the study, when most of the children were using cursive at some point in their writing, there were 880 lower case M's and 2004 lower case N's produced.

Two points need to be made in relation to these figures and the amount of lower case M and N formation problems (See Table IV-9). First, problems with M and N are not proportional to their frequency in the texts. N represents almost three times more opportunities for problems since it occurs almost three times more in the data. However N has less than a third of the problems the M has. Secondly, the lower case M problem in cursive probably occurs because the manuscript M might be perceived as similar to the cursive N. All the subjects who had a cursive M problem wrote it in such a way that it resembled the M in manuscript which, of course, made it look more like a cursive N. Similar issues relate to the manuscript and the cursive V, U and W. That similarity seems to account for the large number of cursive U problems.

Reversals

The reversals of letters in children's writing has long been publicized as a feature that represents some kind of learning problem. In the popular press and media, Einstein and Da Vinci are purported to have seen their own writings and formulas backwards. In the literature, however, reversals have always been reported as occuring in small numbers in both reading and writing. (Gibson and Levin, 1975, p. 497) However, since many teachers and diagnosticians believe that reversals are a cause of concern, we decided to analyze the reversals produced by the children in this study in some detail. As far as we can tell this may be the first discussion of reversals in the context of children's real writing (Frith, 1971; Watt & Jacob, 1975; Davidson, 1934).

Table IV-11 shows that lower-case b and d are the only two letters that are numerically worthy of attention; these two letters represent 80% of all the reversal problems produced by our subjects. Because the descender letters g, p and q which look similar to b and d are often cited as related reversal problems, the five letters, b, d, g, n and q were all analyzed in depth for all subjects over the two year period.

Table IV-11 shows the total number of reversals for each year and the percent of the reversals based on total numbers of letters produced for each subject. The numbers of each of the letters under consideration that each child produced for each year is also shown.

The category marked "Others" includes the letters g, p and q combined. If an "Others" problem existed for one child the letter indicates which of the three letters was the problem. Next to each number of problems, the total opportunities for reversals are indicated by the number of b's and d's or g, p and q combined which occured for each child in their writing for each year. For example Anna produced 38 lower case b's in Year I and 70 in Year II. She reversed 7 of those in Year I and 7 in Year II, but six of the 7 in Year II were in cursive. Anna used 175 d's in her writing in Year I and 266 in Year II, reversing 5 in Year I and 4 in Year II. She produced 146 p, g and q's combined in Year I and 212 in Year II and did not reverse any. Her total reversals were 12 in Year I representing 3.34 percent of all the letters analyzed for reversals and 11 reversals in Year II, representing 2.01 percent.

An initial point of interest is that frequency of occurrence of a letter and frequency of reversals do not match. Each child produced the letter d more often than b or than the combined occurances of g, p and q. The rank for the frequency of the other letters is not the same among all subjects. Q, of course, represents the smallest number for all the letters occuring from 0-6 times for any one child for any one year. In most of the other cases g tends to occur more often than b and p tends to occur less than both b and g but this is not true for all subjects.

Subjects as a group produced more b reversals than d reversals both years, although there were some individual subjects who produced more d reversals each year. (See Table IV-11).

TABLE IV-11A Reversals for Subjects Involved in Years I and II

		Year 1		Year 2	
		Reversals	Total	Reversals	Total
Dana	b	0	90	0	142
	d	0	197	0	308
	others	0	193	0	266
	Total	0	480	0	716
	Percent	0.00		0.00	
Vincent	b	5	64	0	82
	d (all)		182	0	159
	(d)	1			
	(D)	1			
	others	0	134	0	167
	Total	7	198	0	249
	Percent	3.54		0.00	
Rachel	b	0	55	1	58
	d	0	147	0	171
	others	0	91	0	115
	Total	0	293	0	344
	Percent	0.00		0.29	
Gordon	b	0	39	1	104
	d	0	183	0	246
	others	0	116	0	208
	Total	0	338	1	558
	Percent	0.00		0.18	
Anna	b	7	38	1	70
	b cursive			6	
	d	5	175	4	266
	others	0	146	0	212
	Total	12	359	11	548
	Percent	3.34		2.01	
Elaine	b	9	34	2	45
	d	3	229	4	198
	others total)		128	0	129
	(p only)	2	(p=68)		
	Total	14	391	6	372
	Percent	3.58		1.61	

Table IV-11B Reversals for Subjects in Year I only

		Reversals	Total
Mike	b	0	42
	d	0	167
	others	0	157
	Total	0	366
	Percent	0.00	
Jean	b	0	52
	d		210
	d cursive	1	
	others	0	196
	Total	1	248
	Percent	0.40	
Mary	b	6	52
	d	7	207
	others	0	148
	Total	13	407
	Percent	3.19	
Mark	b	0	7
	d	0	23
	(others total)		18
	(g only)	2	5
	Total	2	53
	Percent	3.7	

Table IV-11C Total Reversals for All Subjects for Both Years

	First Year		Second Year		Both Years	
b	27	473	11	501	38	974
Percent	5.71		2.20		3.90	
d	18	1720	8	1348	26	3068
Percent	1.05		0.59		0.85	
other	4	1327	0	1097	4	2424
Percent	0.30		0.00		0.17	
Total	49	3520	19	2946	68	6466
Percent	1.39		0.64		1.05	

For each individual the numbers of b and d reversals do not necessarily diminish from one year to the next although there are some qualitative changes. For example, Anna's reversals of b become a cursive problem. Elaine's number of reversals of b diminish from Year I to II but her reversals of d stay the same. Unfortunately we do not have Year II data on Mary. Gordon and Rachel each produced one b reversal during Year II after not producing any b reversals in Year I or any reversals on any other letter. These unique cases need to be placed in a category of errors which any writer, professional, adult or child, can produce at any point in any writing situation. For example, Rachel's cursive b reversal occurred in the word ABOUT. However, in this particular context she was having difficulty spelling ABOUT. She wrote it twice. The first time she produced ADOAT. She then revised by crossing out this first attempt out and producing ADOUT. It is possible that as she concentrated on the spelling and revision, her attention was drawn away from the conventional directionality of the b. In this same story Rachel produced 45 b's. All except one occurred in initial positions in the word. The b in ABOUT is not in an initial position. In generating an invented spelling for the word HAPPENED Rachel produces a medial b conventionally, also writing other p's and d's in this story conventionally. (She produced 46 d's and 9 p's.) These single cases may not seem worthy of so much attention. However, they may help to put the issue of reversals into perspective as a problem and allow for some theoretical conjectures.

From reviewing the literature on reversals and viewing the data reported in this document, several conclusions have been drawn concerning reversals. First, reversal problems are extremely infrequent. None of the reversal problems occurs consistently over time; that is, no subject reverses all reversible letters nor does any one subject reverse any one letter on all occasions. Percentage of reversals in this data is even smaller than data reported in other literature (Frith, 1971). Most research on reversals has been done on reading and writing or copying of individual forms, letters or words out of the context of text. The smaller number of reversals produced by our subjects and reported in miscue analysis research (Goodman and Goodman 1978) may be due to the context of the letter within a written text. The finding strongly suggests that context has an influence on the production of reversals; i.e., that letter orientation is more predictable in context.

Other influences on reversals include object permanence, overgeneralization of directionality, (Watt and Jacobs, 1975), and letter frequency. Each of these phenomena may play a role at different developmental points in children's writing. Object permanence may be the first significant influence. The child learns that a letter or number is produced or perceived in a certain way. In children's development of other concepts, once a child learns that something has a particular property, it is still that particular thing regardless of change in the object or in the direction that particular object is facing. For example, books are still books whether they are upside down or backwards. Apples are apples regardless of their color, their shape or how they are placed on the table. Letters and numbers, however, have to be learned as exceptional cases. Their direction makes a difference in some situations. P, b, d, g, and q, depending on their particular orientation in a particular type of manuscript or cursive writing, can still become different letters. It is interesting that these are the letters that seem to still be reversed in the writing of third and fourth graders who reverse letters.

There is some evidence in the research of others that the left-facing letters and numbers such as J, 3, 7, etc. have a longer reversal history among young writers than the right facing ones. Since more letters in English are left-facing, this gives rise to the notion that overgeneralization of directionality is also an influence on reversals (Watt and Jacobs, 1975). J was reversed only once by one subject and none of our subjects reversed any numbers, although they all wrote numbers as part of their texts.

The overgeneralization notion of directionality should yield more reversals of d's than b's. This is not true of our data. It seems that the issue of directionality may be complicated by frequency since d occurs much more frequently than b. The various issues related to reversals need to be explored further. Some of these notions need to be examined for even younger children than those in this study in order to gain more insight into developmental questions related to reversals. The data collected in this study will be analyzed in greater depth in the future to gain further insight into the linguistic environments in which reversals are embedded. Most of the reversals seem to be on initial letters in the word. To what degree does the percentage of problems change when one looks at reversals in medial or final positions? Regardless, the issue of reversals must not be used as an automatic symbol of learning problems. Reversals must be examined in different contexts and their frequencies calculated in terms of opportunities in order to demonstrate that a real problem exists. Remediation itself may keep a problem alive which might have resolved itself as children use writing and reading for a variety of functions.

Syntax: Analysis and Findings

with Sherry Vaughan and Suzanne Gespass

In preparation for the analysis of the syntactic data we considered several sources: development of grammatical insights from miscue analysis research (Goodman & Burke, 1973, and Goodman and Goodman, 1978); previous writing research studies (Graves 1982; Wilkinson et al., 1980); recommendations from linguists such as Peter Fries at Central Michigan University, and linguists at the University of Arizona including Adrian Akmajian, Adrienne Lehrer, Richard Demers, and Richard Oehrle, and Papago language consultant Ofelia Zepeda. Our major grammatical resource was Quirk and Greenbaum (1973) which was suggested by our linguistic consultants.

The National Assessment of Educational Progress (NAEP) system, designed to describe and evaluate the writing of 9, 13 and 17-year-olds, also gave us direction. The NAEP 1980 system, built on the research base of Hunt's (1966) T-unit analysis, provided a foundational format for describing embeddings and conjoinings that research has shown are the indices of syntactic maturity. We adopted their procedure for describing clauses and phrases per T-unit as an indicator of embeddings, although we have certain reservations about their total system. Our reservations and subsequent adaptations will be discussed below.

We also decided to describe certain other syntactic structures at the phrase level, e.g. adverbial phrases, noun phrases, verb phrases, prepositional phrases, and certain clause markers. These elements could then be analyzed separately for the unique role they play in the development of syntax in children's writing. Rather than specifying conjoinings as intra- and inter-T conjoins as NAEP does, we decided to describe each separately. We wanted the option of examining the role of each type of logical tie represented by various conjoins since some researchers (Vaughan, 1983) have suggested that certain unique features may be represented by developmental written language which are not characteristic of what is considered conventional written language, the model used by NAEP.

We found also that the NAEP system, although designed to describe the syntax of 9-year-olds, could not account for some of the representations of oral language that occur in young children's writing. For example, Vincent writes:

Vincent's Text 12/8/82

> THE PEOPLE WHO WERE GOING TO RIDE THE NEXT
> BULLS WERE FLOYD HE WAS MY COUSIN. THE NEXT
> BULL RIDER WAS I FORGOT THE OTHER ONES.

NOTE: Invented spelling has been changed to conventional in this section of the report in order to accommodate the reader.

This example demonstrates clearly how the author's oral language competencies interact with his attempt to produce certain written language features. In oral language it is not uncommon to stop to explain the name of someone who has just been mentioned. In writing the character is usually introduced, and then described in certain ways such as an appositional phrase. Vincent may be moving toward the latter construction but is not yet in control of the form. The two WERE'S in the first sentence indicate that Vincent perhaps had the intention of talking about more than one bull rider. Floyd, Vincent's cousin, is one of them, but by the time the writer comes to the point in the second sentence where he intends to tell the reader about the other bull rider(s) he indicates that he can't remember who they were.

The NAEP system would code the first sentence in this example as an error of faulty sentence construction due to an agreement problem. (Example: talking about a group of people first and then only discussing one person.) The second sentence would be coded as an error of faulty construction due to awkward construction of the verb. What is happening, though, is that Vincent is trying to express some complicated interrelations while keeping his audience in mind. He does not fully control all the written language conventions that he needs at this point in time but is using some interesting forms such as the double subject in the first sentence.

The NAEP system views these complications as problems and deals little with how such complications reflect writing development. We chose, however, to more fully describe the cognitive and linguistic complexities and the interplay between the two surrounding the task the child is engaged in when these interesting linguistic features occur.

Our aim is to focus on the nature of the task with which the child is engaged in order to more clearly understand why children do what they do as they write. Merely coding the problem the child has as an error in meeting written language conventions does not help us understand the reasons why errors occur nor what way they may relate to development.

In attempting to account for linguistic complexities like Vincent's above, we suggest that it may be that these are oral language features which serve as a transition from informal oral language structures to more formally specified written language conventions. They may represent some complicated thoughts which are not yet controlled in the production of written language and be caused by a combination of factors. The system for analysis we finally devised needed to be flexible enough to account for various features of syntactic complexity that our population actually produced as well as show aspects of their writing that might be considered problems.

Although we consulted various linguists, we found that opinions on how to best describe syntactic structures vary. Whenever the children produce language structures that could not be described by our system, we consulted the various sources mentioned earlier and then made decisions, adopting the suggestions which best fit our data and our theoretical framework. As a result, our system evolved as more and more data were analyzed.

The following description represents the final result of our evolving system for describing the syntactic features produced by our subjects.

Analysis is on the T-unit, clause, and phrase level of each composition. It is necessary to understand that language in the context of its use has its own constraints on types of sentences, clauses, phrases, and grammatical functions used by the writer. If few imperatives are used there will be few T-units or clauses starting with a verb phrase. The discussion of the syntax the subjects produced therefore reflects their general knowledge of English as well as the structure of the English language, and both constrain the syntactic choices available to authors in their making of meaning.

Since the data which we will present in this chapter overwhelmingly documents that the language users are English speakers and writers, the results in this section should not be surprising but should provide information about the kinds of syntactic structures used by English speakers in the writing produced for this study.

The following discussion first presents the various linguistic units used for syntactic analysis, the rationale for decisions involving those units and the analysis of data for each.

Linguistic units used for analysis categories for syntactic analysis are organized around three linguistic units: the T-unit, the clause and the phrase.

T-Units

This analysis of T-units was done according to Hunt's (1966) definition:

> Minimal terminable units, are "terminable" in that it is grammatically acceptable to terminate each one with a capital letter at the beginning and a period or question mark at the end. They are "minimal" in the sense that they are the shortest units into which a piece of discourse can be cut without leaving any sentence fragments as residue. . . Each is exactly one main clause plus whatever subordinate clauses are attached to that main clause (Hunt, 1966, P. 737).

In addition, the T-unit is further categorized as dialogue, imperatives, questions, and interjections. Procedures for categorizing each type of T-unit and the definitions for each category follow: (The version of the procedures used by the researchers for computer coding is in Appendix IV-D.)

DIALOGUE is coded for all dialogue which is considered to be a direct quotation and includes the dialogue carrier. Any new T-unit within the same dialogue is coded as a separate T-unit but part of the same dialogue. If a new character initiates dialogue, a new dialogue is coded. If a dialogue is also an interrogative or imperative, this information is also marked. A dialogue and its dialogue carrier are coded as one T-unit but as two clauses.

IMPERATIVES, INTERROGATIVES AND INTERJECTIONS are counted as T-units but also categorized separately.

HEADINGS include all formal openings and closings. Headings are not part of the clause, phrase or T-unit count. A date as part of the letter is coded as a heading but if its purpose is to simply date the paper it is not considered part of the writer's text.

Whenever it is not possible to determine the T-unit, clause, or phrase structure of a linguistic unit it is then coded as a MAZE and not counted as part of the T-unit data.

Clauses

We consider clause level description particularly important because it is here that we expect the most growth over time. Hunt's work (1970) and that of others (O'Donnell, Griffin, and Norris, 1967; Milz, 1983) has shown that the clause is an important indicator of text complexity because as maturity increases so does clause frequency and density.

We code as clauses those structures which usually occur with each verb in the T-unit, except for simple compound verbs (He runs and jumps) and continuous verbs (He is going to get sick).

Each T-unit has a main clause. In addition, all other clauses are coded as conjoined, adverbial or nominal. Whenever we had problems we looked to Quirk and Greenbaum (1973) for clarification. The following section provides the definitions we use for coding: (see Appendix IV-D.)

MAIN CLAUSES are categorized as any independent clause, or anything that stands by itself, including many idioms, terms of address, negative and positive responses. A dialogue carrier is a main clause, and the following dialogue is treated like any other clause, including a main clause.

CONJOINED MAIN CLAUSES are not simply compound verbs but are two conjoined main clauses.

ADVERBIAL CLAUSES are subordinate clauses, including a verb, which may function as an adverb. (See Quirk and Greenbaum, 1973, Chapter 11.)

NOMINAL CLAUSES are subordinate clauses including a verb which may function as subjects, objects, complements or modifiers. (See Quirk and Greenbaum Chapter 11.) Whenever a clause is interrupted by a main clause or any subordinate clauses it is counted as part of the original clause it belongs to.

In the process of specifying types of clauses produced within T-units, our descriptive system evolved as we considered ever-increasingly complex data across time. Initially our descriptive system included five separate kinds of clauses: main, infinitive, relative, dialogue and comparative. That system had originated from two sources: our own data (those types of clauses were being produced by our subjects) and linguistic descriptions others had devised (e.g., Hunt, 1966; NAEP,1980). We found, however that certain problems arose with that early plan. One specific problem was that the categories often overlapped. For instance it was possible to code some clauses in more than one category e.g., SHE IS THE ONE TO SEE. This sentence contains a main clause and an infinitive clause which also could be coded as a relative clause. Also because adverbial clauses are not all accounted for by the five types above, we needed to add that type to our list.

Consequently our descriptive system became so unwieldy that our researchers, none of whom were trained linguists, found discriminating between types of clauses very difficult. As a result, on advice from some of our linguistic advisors, we elected to settle on a more simple surface analysis at the clause level concentrating on four major types of clauses: main, conjoined, adverbial and nominal. Even though this final system was more simplistic than any of the previous versions had been, it provided an adequate description of the complexity of our data. By focusing on embeddings as either nominal or adverbial we could indicate the major element of the sentence that was being expanded, either verb or noun, and then describe that expansion in more detail at the phrase level.

The decision was made to indicate each group of words containing a verb as a separate clause. That was not a simple decision either, however, since some verbs appear to have several continuous actions while others seem to include several separate actions occurring simultaneously, e.g., WE WENT TO GO SEE THE RODEO (continuous) and WE WENT HOME TO SEE IF OUR PARENTS WERE THERE. (Three separate actions: WENT HOME, TO SEE, IF OUR PARENTS WERE). When disagreements arose during the second checking by a second researcher concerning the appropriate labeling of clauses we considered each separately until a unanimous decision was reached.

Phrases

Within each clause, phrases are categorized as NOUN PHRASES, NOUN PHRASE MODIFIED, VERB PHRASE, VERB PHRASE CONJOINED, VERB PHRASE COMPLEX, ADVERBIAL PHRASE and PREPOSITIONAL PHRASES. Also units which often stand alone (such as HELLO, THANK YOU, YES) are defined as MAIN CLAUSES and coded as INDEPENDENTS at the phrase level (See Appendix IV-D). Definitions follow:

NOUN PHRASES include the noun plus determiners such as: proper nouns; conjoined nouns; pronouns and compounds (with or without hyphen). NOUN PHRASE MODIFIED is a noun phrase as defined earlier plus one or more adjectives or possessives.

VERB PHRASE includes the main verb plus any auxiliary, modal, and/or NOT as well as any particles. VERB PHRASE CONJOINED includes any compound verbs.

VERB PHRASE COMPLEX includes the predicate adjective such as TO BE, etc. plus complement; verb plus adverb, including nouns functioning as adverbs such as RAN QUICKLY, WENT HOME, CRIED TOO; verb markers such as STARTED, STOPPED, USED TO, HAVE TO, GONNA, etc. VERB PHRASE COMPLEX CONJOINED are combinations of verb phrase conjoined and verb phrase complex.

ADVERBIAL PHRASES include a phrase that modifies the whole sentence as well as the verb such as ONCE UPON A TIME, etc. PREPOSITIONAL PHRASES include anything that starts with a preposition. Whenever anything stands by itself it is coded as INDEPENDENT. These include GREETINGS, TAGS, AFFIRMATIVE or NEGATIVE RESPONSES, e.g., THANK YOU, HELLO, OKAY.

At the phrase level, where we tried to specify the type of expansion occurring within clauses, some other troubles have arisen. It becomes difficult in some instances to specify differences between adverbial phrases and prepositional phrases that function as adverbials. For example HE WENT HOME and HE WENT TO HIS HOUSE. In the first sentence, HE WENT HOME, the phrase level coding would be noun phrase (np) - verb phrase complex (vpx) since the adverb HOME increases the complexity of the verb WENT. But the coding for the second sentence would be noun phrase (np) - verb phrase (vp) - prepositional phrase (pp). The verb, no less complex in this sentence, appears as only a verb phrase and the interpreter must look to the prepositional phrase as an indicator of verb expansion. Thus, the same level of complexity is described in two different ways. We do not see that problem as major, though, as long as both are considered as parallel indicators of complexity.

Clause markers and introductory adverbial phrases are also difficult to discriminate. Consider the use of AFTER THAT as an inter-T conjoin and THEN as an adverbial clause marker. It becomes difficult to distinguish between the two, yet our subjects appear to use them in different ways. The final decision was to code an introductory adverbial phrase as a clause marker only when it connects its sentence to the previous one, and to code it as an adverbial phrase when the phrase appears to modify only the sentence it introduces. ONCE UPON A TIME would always be coded as an adverbial phrase (ap) while THEN could be coded either as an adverbial phrase (ap) or as a clause marker depending on its function. More will be discussed concerning this issue as the syntax data is summarized.

Verb particles, such as UP in HE JUMPED UP as opposed to the UP in HE JUMPED UP THE STAIRS, were also possible problems. For instance, in one subject's piece about an old man cutting down a flower, the student writes: HE WAS CUTTING PLANTS DOWN and HE CUT THE DAISY DOWN.... It is possible to code both sentences either as noun phrase (np) - verb phrase (vp) - noun phrase (np) - adverbial phrase (ap) or as noun phrase (np) - verb phrase (vp) - noun phrase (np) - continuation of verb phrase (vp&). Since our decision was that DOWN is functioning as a verb particle in both sentences and not as an adverb, we made the decision to code it according to the second option above.

Noun phrases also gave us problems in some instances. Consider this subject's description of people from Saturn: THEY WERE LONG PEOPLE AND STRAIGHTHEADED. We coded this sentence noun phrase (np) - verb phrase (vp) - noun phrase modified (npm). Our system doesn't reflect the compound feature of the noun phrase although it does describe the modification (npm). Our decision to not code the compound feature of either noun phrases or prepositional phrases was based on our desire not to confuse the functions of AND: combining elements through compounding and marking clauses. Since clause markers function as an indicator of complexity, we chose to count only those functions and not confuse them with the other variety.

Results of T-unit, Clause and Phrase Analysis

The subjects produced 2218 T-units over the two year period. Table IV-12 shows clause per T-unit and word per T-unit statistics for our subjects (I.O. grade 3 and I.O. grade 4) and compares their results with statistics from four other studies (Milz, 1983; O'Donnell, Griffin, and Norris, 1967; Hunt, 1966, 1970; Ward reported in Milz, 1983).

Table IV-12 T-unit Development: Five Research Studies

TABLE IV-12 T-UNIT DEVELOPMENT : FIVE RESEARCH STUDIES

	MILZ GRADE 1	WARD GRADE 2	O'DONNELL GRADE 3	I.O. GRADE 3	HUNT GRADE 4	I.O. GRADE 4	HUNT GRADE 8
CLAUSE/T-UNIT			1.18	1.40	1.29	1.43	1.42
V				1.73		1.58	
D				1.36		1.4	
A				1.43		1.39	
R				1.18		1.28	
E				1.16		1.32	
G				1.61		1.58	
WORD/T-UNIT	5.46	6.98	7.67	7.14	8.51	7.54	11.34
V				8.5		8.8	
D				7.21		7.8	
A				6.77		6.98	
R				6.0		6.02	
E				5.8		6.74	
G				8.04		8.31	

The comparisons are most interesting. For Table IV-12 we used only the data from the six subjects who were in both years of the study so the comparison represents the same children across time. Our subjects' clauses per T-unit range from 1.16 to 1.73 with a mean of 1.4 in Year I. This mean is higher than Hunt's mean of 1.3 for his grade four research. In Year II, our subjects clauses per T-unit range from 1.28 to 1.58 with a mean of 1.43. This is somewhat higher than Hunt's grade 4 subjects and similar to his grade 8 subjects. Clauses per T-unit does not change much statistically across time as the means between Hunt's fourth and eighth graders show. However, the importance of these results indicate that our subjects are producing a slightly higher mean number of clauses per T-unit than other fourth graders in other studies.

Our third graders have slightly lower words per T-unit than O'Donnell's third graders or Hunt's fourth graders. However, in both years we have subjects who produce more words per T-unit than either O'Donnell's or Hunt's subjects' means. The mean for our students is higher than Ward's second graders. Our subjects produce .4 more words per T-unit in fourth grade than third grade. Viewing the Milz, Ward and O'Donnell, Griffin, and Norris studies, there is a definite developmental trend statistically from grade to grade. One problem in this comparison is the variety of writing tasks used by the subjects in the different studies. Only more in-depth analysis can account for the development and differences reflected in the statistics. However, there is no evidence here that our subjects lag behind the writing of other children from different cultures in any important way.

Development in words per T-unit can also be analyzed by looking at Table IV-13. Every subject except Rachel writes more T-units which have 10 words or more in Year II than Year I. In most cases, except for Gordon, the T-unit with the highest number of words occurs in Year II.

Table IV-13 T-Units of 10 Words or More: Years I and II

	YEAR I TOTAL NO.	HIGHEST NO. WORDS PER T-UNIT	YEAR II TOTAL NO.	HIGHEST NO. WORDS PER T-UNIT
Vincent	23	27	36	31
Dana	26	25	42	39
Anna	20	17	35	21
Rachel	10	13	10	15
Elaine	4	16	17	26
Gordon	22	29	38	18

We tested the clause per T-unit and word per T-unit data of our own six subjects over two years for significance. We organized the data by dividing the T-units exactly in half chronologically over the two years. This gave us a slight change in means from those reported in Table IV-12. The clause per T-unit analysis showed a significant growth at the .008 level while words per T-unit growth was significant beyond the .0001 level.

Table IV-14 T-unit Types: Years I and II

		Year I		Year II		Years I and II	
Texts		176		102		278	
Total T-Units		1236		982		22[illegible]	
Declarative	- D*	60	4.85%	49	4.99	209	4.91%
	- Non-D**	1142	92.39	876	89.21	2018	90.98
Interrogative	- D	19	1.54	19	1.93	38	1.71
	- Non-D	10	0.81	20	2.04	30	1.35
Exclamatory	- D	1	0.08	1	0.10	2	0.09
	- Non-D	0	0.00	1	0.10	1	0.05
Imperative	- D	4	0.32	15	1.53	19	0.86
	- Non-D	0	0.00	1	0.10	1	0.05
Total	D	84	6.80	84	8.55	168	7.57
	Non-D	1152	93.20	898	91.45	2050	92.43

* D-Dialogue ** Non-D - Non Dialogue

Most of the T-units produced by the subjects were declarative statements (See Table IV-14). In addition to declaratives the subjects produced exclamations, imperatives, and interrogatives. These are all shown in Table VI-14. Almost 96% of all the T-units produced for both years of the study were declaratives. Interrogatives, exclamations and imperatives are all used infrequently representing about 4% of all T-units. Year I in Table IV-14 shows the results of 10 subjects and Year II the results of six subjects. It seems as if the Year II subjects are somewhat more flexible in their use of the various T-unit types. Interrogrative use increases for Year II as the subjects begin to use more questions in non-dialogue settings. Dialogue is used to a greater extent in Year II than Year I. By Year II, the students show more flexibility in their use of imperatives as part of their dialogues as well. This same kind of flexibility can be seen in the clause data as well (See Table IV-15). Over the two years the children use fewer conjoinings of main clauses and use a larger percentage of embeddings of adverbials and nominative clauses.

Table IV-15 Clause Types: Years I and II

	Main	Conjoined	Adverbial	Nominative	Total
Year I	1236	159	163	174	1732
% of Total	71.36	9.18	9.41	10.05	
Year II	1015	103	160	136	1414
% of Total	71.78	7.28	11.32	9.62	
Year I & II	2251	262	323	310	3146
% of Total	71.55	8.33	10.27	9.85	

T-units are produced in a small set of patterns. Our subjects started their T-units with connectives (AND, BUT, SO) 22% of the time; with other clause markers 12% of the time; with adverbial and prepositional phrases 13.5% of the time; with verb phrases .9%; and with question markers 1% of the time. However, at least 50% of their T-units start with noun phrases. These ways of beginning T-units are common for writers of English. The only one which might be inflated for this group of writers in comparison with older writers is the use of connectives. These third and fourth graders start their T-units 491 times or 22% with AND, BUT or SO, with AND being the most frequent of the three. This is probably a common pattern for this age level in writing and has been reported by others (Hunt, 1970). What is important is that the students in Year II used fewer connectives in initial positions than students used in Year I. This suggests students may already be moving away from the run-on sentence type. In Year I the 10 subjects produced 420 connectives initiating clauses. Three hundred twenty-six of those or 77.6% occurred at the beginning of the T-unit. In Year II 165 of the connectives, or 72.6%, occurred at the beginning of T-units.

Given the variety of ways a T-unit can begin, it is interesting to note that in the majority of cases only two basic patterns of phrases occur within T-units. The largest phrase pattern is subject-verb-object which includes subject-verb-object preceded and/or followed by prepositional or adverbial phrase. Some examples include:

(np) (vp) (obj)
THEY HAD A BABY (Jean 11/3/81)

(ap) (np) (vp) (obj) (pp)
NOW HE HAS RATTLES IN HIS BODY (Jean 2/11/82)

The second group pattern is subject-verb including subject-verb followed by prepositional phrase or adverbial. Some examples include:

(np) (vp)
HE WAS LAUGHING (Jean 2/11/82

(np) (vp) (pp)
THE SNAKE WAS CRAWLING IN THE DESERT (Jean 2/11/82)

A few English patterns which these subjects use infrequently include starting a T-unit with a verb phrase or a question marker followed by a verb phrase. These account for the imperatives and interrogatives mentioned earlier which usually occur in letters to pen pals or friends or in dialogue in narratives. Some examples include:

(q) (vp) (np)
HOW LONG WAS THE OPERATION (Anna 4/19/82)

(vp)
DON'T CRY (Elaine 12/10/81)

When the subjects write more then one clause these patterns become more complicated but basically follow the phrase patterns they do in the single T-unit clauses. It is interesting to examine some of the multiple clause per T-unit patterns.

> The boy was crying and went home and told his father what happened (4 clauses, 15 words -- Ruth 2/9/83)

> Little knife got scared when his father said that he could carry the deer with him (3 clauses, 16 words--Gordon, 3/24/83)

> Well, one day William was fixing a bow and arrow for his son's birthday, when a father came to talk to William about a meeting (2 clauses, 25 words--Dwayne 2/9/83)

> But my mom says if I really wanted to be a medicine man, I would have to go to the grave yard and sleep by a medicine man that was living many years ago (5 clauses, 31 words--Vincent 2/16/83)

Certain sections of a text occasionally were unintelligible because we were unable to reconstruct the clause or phrase structures. An example follows:

> And it was over. So the and the people went home.(Elaine, 11/3/81)

Other sections had words or phrases missing often because it was the last line of the story or linguistic units were repeated. An example of each follows.

> One Saturday night when I was asleep a monster
> attacked me but when the monster
>
> In the morning I will get up in the morning. (Jean 3/30/82)

These types of structures were coded as mazes and were not part of the T-unit count. An obvious aspect of development of our subjects is a decrease of the number of mazes from 40 in Year I to 33 in Year II.

Headings were also coded separately. The data shows that subjects used 89 headings in Year I and 104 headings in Year II. This again shows a developmental pattern in the area of concern for the form in which letters, stories and reports are organized.

Problems

In the section on T-units, clauses and phrases, we describe and categorize the linguistic units used by the subjects in this study. In this section we look at syntactic and cohesion problems that we flagged. Although we flagged dialect in the problems column on the coding sheet we don't consider it a problem and it will be discussed next in a separate section.

The definitions and the procedures for categorizing each problem type follows (See Appendix IVD). If a problem affects a whole sentence or phrase, it is just coded once. Each repeat problem is coded again for each new T-unit.

COHESION problems in most cases involve pronoun referents. Examples:

1. Pronoun referent - HE SHOT AT HIM AND HE DIED.
   (Not clear who each HE refers to.)
2. Semantic incongruity - In a story about Saturn,
   I STAYED WITH MY FRIEND MAY. (No previous introduction of May.)
3. Use of THE when the referent is not previously established
   SO THE MAN WAS RIDING ME
4. Picture referent - THE GREEN FIELD STANDS FOR . . .
   Referent is not within story but in the picture which
   the student is writing about.

Criteria for decisions to code a cohesion problem are based on ambiguity as perceived by the reader/researcher.

Certain structures the subjects produced involve lack of control of various SYNTACTIC constructions. Examples include:

subject/verb agreement;
parallelism from one linguistic unit to another;
word omissions or insertions such as:
    SOMETHING CAME DOWN OF THE SKY;
inappropriate pronoun form such as HE for HIM
    (when not invented spelling);
inappropriate conjunctions, such as using BECAUSE where
    there is no casual relationship.

Some problems are combinations of syntactic and cohesive problems. When that combination occurs the problem was considered MULTIPLE. Some examples include:

THE MAN THAT HIT HIM GOT THE PUPPY WAS UNCONSCIOUS;

THE POLICE SAID, "WE CAN'T. BUT WE DID NOT FIND HIM."

COMPLEXITIES were coded whenever something sounded unusual to the researchers but was not in the other categories. Examples include:

1. oral language forms used in written language, OUR CLASS WAS SCARED, REAL SCARED.
2. developmental attempts to try something new, which don't quite work;
3. pragmatic issues which result in uncommon usages, IT WAS 50 OR 40 FEET TALL.
4. Embedded nominals at clause level or phrase level that seem to be functioning appositionally.

A major conclusion that shows our subjects' development from Year I to Year II is their decrease in the categorized problems, except for a slight increase in cohesion problems per hundred words.

Table IV-16 Problem Types and Frequency

	Year I		Year II	
	Number	Number per 100 words	Number	Number per 100 words
Cohesion	21	.23	21	.28
Syntax	116	1.32	73	.98
Multiple	10	.11	1	.01
Complexity	71	.81	[illegible]	.44

Year I = 10 subjects (8761 words)
Year II= 6 subjects (7483 words)

We also compared only the six subjects who were in the study over two years in terms of problems per hundred words (including dialect), and they show a decrease for 3.77 problems per hundred words in Year I to 2.83 problems per hundred words in Year II.

The data indicates that for the most part the problems the subjects have are small but complex. The fact that these are first drafts suggests the control our subjects have over their language as they write.

What we plan to do with this data is to expand on it: to look in greater depth at each of these types of problems; to relate them to students' behaviors; to categorize them further and use them to gain more insights into students' development.

From the analysis of the syntactic use and development of syntax in our subjects we suggest the following conclusions:

The subjects we have studied are writers of English. All the structures they use are part of English syntactic structures. They use all the major syntactic patterns of English and many patterns that are not so frequent in English. They control these patterns from the beginning of third grade. Over the two year period their sentences tend to become longer, they tend to write more and they use a larger per cent of dependent clauses. These results are cumulative for all stories and for all subjects combined, although it does not often hold true for a particular story in the next chronological sequence or for all children.

Semantics and Pragmatics: Analysis and Findings

The way students learn how to mean through the evolution of their written texts and how they adapt their texts to fit the requirements of particular written language contexts are described in great detail in the in-depth case studies. (See Chapters VI-XI.)

In this section of the report we will focus on the analyses we did on specific aspects of how our subjects use written language to express their meanings. We will focus on ways in which students use certain syntactic and cohesive devices to express concepts; their dialect; ways in which they organize their narratives; the language they use to talk about written language; and the behaviors they engage in which are part of their composing processes.

Textual Cohesion

with Suzanne Gespass, Mary Maguire, and Ann Marek

Halliday and Hasan have described a text as "any piece of language that is optional, functioning as a unity in some context of situation" (Halliday and Hasan, 1976, p. 293). In most texts, each sentence employs some form of cohesion with one or more of the other sentences.

Ties which refer back to items in a text are called anaphoric ties. Some sentences contain cataphoric ties, which connect the sentences with the text that follows. Halliday and Hasan have categorized cohesive ties into five types: reference, substitution, ellipsis, conjunction, and lexical cohesion (Halliday and Hasan, 1976). This section will consider how our subjects are using cohesive ties in written language.

Halliday states that written language is not context bound the way conversation is. The context must be made explicit in a written text in order to be understood and reference is usually found within the text rather than exophorically.

The examination of cohesive ties in children's writing which follows is an attempt to describe how our subjects make their written texts explicit. This section is divided into two parts. The first deals with temporal expressions in the writing of six subjects in Year I. The second section provides a more in-depth description of the cohesive ties employed by three subjects in Year II. Full copies of all texts discussed appear as Appendix IVD.

Temporal Expressions

Time is both complex and perplexing. One has only to think about one's own relationship with time to realize how difficult it is to explain. A year ago can seem like only yesterday; tomorrow may be a long way off. Concepts about time and space and how they are expressed in language are very related. There are deictic and non deictic concepts of both space and time. Whereas space is three dimensional, time is usually one dimensional. The ability to understand and produce temporal expressions is dependent on one's ability to adopt the proper perspective from which to view the referred-to event.

There is general agreement in the area of child language development that time adverbials come into a child's speech production relatively late--between ages five and six--and that there is a direct relationship between this and the child's cognitive development. That cognitive development affects language is not disputed. There is, however, some disagreement as to the exact nature of and the extent of this relationship.

In this section of the report we investigate how time is expressed by our subjects in their writing. For each of six subjects, six to twelve texts have been examined. We have looked most closely at the following features in their writing: (1) conjunction, (2) time adverbials, (3) verb tense, and (4) verb type. All four of these features appear to be directly related to how children express time and order of events in making their texts cohesive.

Coordinating Conjunctions and Time Adverbials

Children, when they narrate a story or retell an experience, often link events together with AND. Conjunction seems to be an important device in making their narratives cohesive. King and Rentel (1981) report that, while others have called children's heavy use of conjunction "stylistically immature," this is not particularly helpful in explaining development. They suggest instead that children use specific types of conjunction to make their texts more precise and subtle. They refer to Halliday and Hasan's (1976) identification of the different types of conjunctions: additive, temporal, causal, adversative, and continuative.

In one study of conjunction in children's writing, King and Rentel (1981) hypothesized that children would use more conjunctions in their own writing than in their dictations. This hypothesis was disconfirmed. The children in their study used more additives, temporal, and causal conjunctions in dictation than in writing, although they did find that a wider range of meaning relations was attempted in dictation than in writing.

Both Clark (1970) and Ferreiro and Sinclair (1971) provide evidence that children do use an order of mention strategy in the oral narrations. Ferreiro and Sinclair report that in a free choice description, when asked to describe two sequential events, the children in their stage one (approximately ages 4-6) either give two independent propositions or weakly link them together with AND and THEN. Both verbs are in the same tense, and the order of mention may or may not correspond with the actual occurrence of the events. When asked to start their narration with the second event, the children, at this stage, just repeat their first description or tell the events separately with no temporal linking. When asked when the events happened, most children answer "now" which links the speech time with the event time but does not link the two events.

Clark, in looking at the spontaneous speech of four-year-old children over a six month period, also reports that AND is first used to link two events and that the order is unimportant because the events are not sequential. They are simply a series of events strung together. She reports that the second meaning of AND is "and subsequently." Here, the order of mention corresponds with the chronological occurrence of events.

Ferreiro and Sinclair's stage two children (approximately ages 6-8) in their free choice descriptions link the two propositions loosely. Verbs are still in the same tense and the order of mention consistently corresponds with the temporal order. The main difference here is that there is the addition of temporal adverbials such as AFTERWARD and FIRST. When asked to start with the second event, the children do as they are told but reason that it is not logically possible to do this. They also tend to introduce a generalized verb which serves as an introduction to the inversion. They insist that there is a problem doing it this way. The children at this stage are able to answer "when" questions correctly.

Clark's stage two children use the order of mention strategy in coordinate clause constructions. The chronological succession is emphasized by the addition of temporal adverbials.

In Ferreiro and Sinclair's third stage (approximately 8-10), the children are able to perform all three tasks correctly. They use temporal subordinate clauses marked by WHEN and BEFORE. They use different verb tenses.

Clark identifies an important factor in her stage three children. In using spontaneous speech samples, Clark found that the children's responses at this stage are entirely dependent on the context of the situation. The children have a keen awareness of theme, and they use that to govern and place their temporal expressions. There is a very apparent relationship between the rheme (remainder) of the preceding utterance and the theme of the following one. (Halliday, 1976)

In the written texts of our subjects, the different categories of connecting propositions are evident. Conjunctions used to mark time in some way are: AND, THEN, SO, AND SO, SO THEN, AND THEN. AND is used most often and it is used in both the additive and temporal sense. Elaine and Gordon use AND more often as an additive than as a temporal conjunction.

Ken Goodman (1983) has pointed out that children use AND in an additive sense in spoken discourse for the deliberate purpose of "holding the floor." It is a device used to guard against interruptions from others. In the children's writing, AND, in this additive sense, seems to be used to provide more information--to elaborate on what has already been given.

Elaine's Text 11-5-81

> THEY HAD A RODEO AND WE WENT TO THE RODEO AND
> MY DAD WAS THERE AND WE WENT HOME AND MY DAD
> WENT HOME AND THEY HAD A RODEO AND MY DAD WAS
> MAD AND I WAS MAD

Usually a very general verb is used and subsequent clauses provide more specific information about the action. In Elaine's twelve texts, she uses many conjunctions in the first three stories and very few specific verbs. While in the first three texts she uses AND 36 times, in all twelve texts, AND appears only 50 times; approximately two-thirds of her AND conjunctions appear in the first three texts. The frequency of verbs in the first three texts are: WENT-22, HAD-6, WENT TO GO SEE-3, WAS RIDING-3, GOT-1, and SAID-1.

In contrast, Elaine uses few conjunctions in texts 4, 5, 6, and 7 and no conjunctions at all in 8, 9, 10, and 11. These texts with no conjunctions are rather like listings that on the surface follow a set pattern (THERE IS . . . HE IS). Although the text on 2/2/82 simply represents a listing of characters, in her text on 2/16/82 Elaine begins to assign attributes to her characters (e.g., HE IS BIG).

Elaine's Text 2/2/82
THERE IS A PIRATES
THERE IS A TROLL
THERE IS A ELF
THERE IS A HUNTER

Elaine's Text 2/16/82
HE IS BIG
HE IS STRONG
HE MAKES EARTHQUAKES
HE MAKES WAVES
HE KILLS ANIMALS

All of the other children use at least one conjunction in each text except for Dana on 3/4/82, his last text. The form of the text is a sports announcement. He has written it all in uppercase letters:

Dana's Text 3/4/82
WHEN THE GAME OVERED THE DOLPHINS WON 16 TO 6
. . . WHEN THE DAY CAME FOR THE GAME . . .
THE DOLPHINS WON IN OVER TIME

Dana establishes cohesion in this text by using WHEN.

One convention in children's narration is to begin stories with ONCE UPON A TIME or ONE DAY. These types of beginnings are employed by all of the children most of the time. The frequency of these are: ONE DAY-27, ONCE UPON A TIME-8, THE NEXT MORNING-4, THE NEXT DAY-3, ONE NIGHT-2, ONE MORNING-1, ONCE-1. They use these not only at the actual beginning of a piece but also when there is a shift of scene.

There are few other time adverbials used by any of the children. Elaine uses OVER once on 11/3/81: THE RODEO WAS OVER SO THEN THE PEOPLE WENT HOME. Elaine uses this construction to explain what happened after the rodeo. She makes the statement that THE RODEO WAS OVER which is followed by a causal SO and then a sequential THEN.

Gordon on 11/3/81 uses the phrase THEY DIDN'T WAKE UP TOO EARLY where TOO EARLY means EARLY ENOUGH. On 11/19/81 Gordon uses AS to mean AT THE SAME TIME WHEN which expresses simultaneity of events: BUT AS THEY WENT A STORM CAME. On 1/7/82 Gordon uses WHEN three times. The first two times he uses WHEN to mean AFTER: AND WHEN WE GOT THERE; WHEN WE GOT DOWN THE CANYON. The third time he uses WHEN to express simultaneity of events: WHEN WE WERE CLIMBING THE HILLS. On 3/4/82, Gordon again uses WHEN three times. Here his text follows a pattern of alternating ONE DAY with WHEN to link events. All three times WHEN means AFTER. On 3/30/82 Gordon uses WHEN to mean AT THE TIME WHICH: ONE DAY WHEN I WENT TO SWITZERLAND AND I SAW A LOT OF HOUSES. Although Gordon uses WHEN in the first clause, he still finds it necessary to include the AND as a link in narrating the order of events. On 3/30/82 Gordon uses AS to express simultaneity of events:

AS I WAS WALKING DOWN THE STREET A MAN SAID DO YOU LIVE HERE. Gordon frequently uses WHEN to mean AFTER; he also uses WHEN and AS to express simultaneity of events.

Rachel uses BEFORE once on 1/7/82 and AFTER once on 2/23/82. Both of these sentences lack cohesion and it is difficult to interpret what she means. On 1/7/82 she writes: THEY WERE GOING OFF TO THE MOUNTAINS ON A HORSE BEFORE THEY PAET? AND THEY WENT OFF. The meaning of the verb after BEFORE THEY is unclear. If PAET is PAID then it can be inferred that this means THEY PAID BEFORE THEY WENT TO THE MOUNTAINS. However, if she means PACKED, then it can be inferred that THEY PACKED BEFORE THEY WENT TO THE MOUNTAINS. It appears as if the writer as an afterthought maybe intends to make clear that they paid before they left on the horses. Rachel uses AFTER on 2/23/82: AFTER I WENT TO SEE MY BEAR'S CAVE HE WAS MAD. The text starts out: ONE DAY I SAW MY GRANDMOTHER. SHE TOLD ME A LEGEND. AFTER I WENT . . . The reader cannot be sure if AFTER refers to the telling of the legend "after that" or if it refers to seeing the bear.

Rachel uses WHEN three times. In two instances it occurs in the last line of the text (2/23/82, 3/4/82) and the sentence is left unfinished. The third time WHEN is used to signal another event: 3/4/82: AND WHEN THEY CAME BACK THE PARTY WAS OVER. Rachel uses several deictic time expressions in adverbials which locate the time as a calendric unit: IN WINTER, ALL WINTER, AT SUMMER, AT NIGHT.

In Year I, Anna uses WHEN four times. In two instances, she uses WHEN to mean AFTER: 2/4/82: BUT WHEN SHE WOKE UP SHE WAS SCARED. 3/11/82: WHEN THE CIRCUS WAS OVER THE PUPPY BARKED. In the other two instances she uses WHEN to mean WHILE: 3/30/82: WHEN I WAS IN SWITZERLAND . . . 3/11/82: WHEN HE WAS GOING HOME A CAR HIT HIM.

Jean uses WHEN only four times; twice on 1/5/82 and twice on 3/30/82. However, in contrast to Anna, she does not use WHEN to mean AFTER but as a temporal adverbial: WHEN I WAS THERE . . . WHEN SANTA CAME DOWN. She also uses NOW to juxtapose past and present reality in her stories: 2/11/82: AND HE RAN INTO SOME RATTLES AND NOW HE HAS RATTLES IN HIS BODY. She uses BEFORE and the prepositional UNTIL to accentuate duration: 2/16/82: IT WAS A LONG TIME BEFORE THE RACE WAS OVER. 2/2/82: UNTIL DINNER TIME. 3/30/82: UNTIL LUNCH TIME.

The writer's sense of story was discussed earlier in relation to established story beginnings. All six of the children exhibit this conventional feature of story beginnings. Jean also uses conventional story conclusions to express duration: 1/5/82: NEVER CAME BACK AGAIN. 2/2/82: LIVED HAPPILY EVER AFTER.

Dana demonstrates the most flexible use of adverbials. He uses BEFORE twice in the two different positions: 11/5/81: BUT HE GOT HOME BEFORE HE COULD GET HIM. . . BEFORE THEY COULD PUT HIM IN JAIL THEY KNEW THAT THEY GOT THE WRONG ONE. Dana uses WHEN three times, twice as AFTER: 1/7/82: WHEN THE GAME WAS OVER THE PHOENIX SUNS WON. 2/4/82: WHEN THEY RESCUED GEORGE THEY WENT BACK. Dana, like Jean, uses UNTIL to express duration on 1/12/82: THEN WE WROTE A STORY. UNTIL THE BELL RANG. In this same story, Dana also distinguishes units of time with YESTERDAY, TODAY, and TOMORROW. This text is a personal report about his own work in school. In contrast to this , the text on 2/4/82 is a fairy tale. Here, Dana uses FINALLY twice: FINALLY THEY SAW THE CASTLE . . . THE KING'S MAN FINALLY WON. He uses SOON once: SOON THEY FOUND THE CELL.

Both Dana and Jean use adverbials to compare and contrast the durative and simultaneous features of time.

Verb Tense and Verb Type

As mentioned earlier, there is some controversy in the literature as to when children understand the concept of tense. Both Cromer (1971) and Ferreiro and Sinclair (1971) propose a strong decentering hypothesis; the egocentrism of children prevents them from going beyond the present speech time until they are cognitively able to, as measured by conservation tasks, which is usually after the age of six.

What is significant in our writing data is how these children choose to express temporal relations in regard to tense.

Jean and Dana are the only subjects who use future tense in Year I. Jean employs the future on 3/30/82. IF I LIVED IN SWITZERLAND I WOULD CLIMB THE MOUNTAINS OVER THERE. It is interesting to compare this with how Gordon and Anna structure their texts on this same topic: Gordon 3/30/82: ONE DAY WHEN I WENT TO SWITZERLAND AND I SAW A LOT OF HOUSES AND BUILDINGS. Anna 3/30/82: WHEN I WAS IN SWITZERLAND IN THE WINTER THEY HAVE A HORN THAT CALLS THE COWS HOME. Gordon proceeds to use the past progressive and constructs a dialogue sequence between himself and someone he meets. Anna starts out WHEN I WAS IN SWITZERLAND, but immediately takes herself out of the narrative and switches to the present tense where she proceeds to list what they have in Switzerland. Dana uses the future on 3/4/82 in a free choice assignment which starts off as a story (ONE DAY) but immediately shifts to a kind of journalistic sports announcement. On line 6 he uses a complex verb structure: THE DOLPHINS WILL HAVE TO GET READY TO PLAY THE SAN DIEGO CHARGERS. In this piece, Dana writes about two different games which he links together with line 6 stated in the future tense. By putting this game in the future, he establishes that it is a different game. Once he has established that he is discussing a different game, he goes back to the past tense narrative.

In Year I, Elaine, Gordon, Anna, and Rachel do not use tense consistently either inter-sententially or intra-sententially.

Conclusions about Temporal Expressions

Following are some general observations and hypotheses about the development of temporal expressions.

It appears as though less proficient writers may employ the strategy of matching order of mention with order of events at all times. Less proficient writers may also use more generalized verbs as well as more generalized meanings for clause markers used as conjunctions such as AND, THEN, and WHEN.

The more proficient writers may be better able to deal with the features of duration, simultaneity, and iteration by making sharper contrasts and distinctions in their choice of lexical items and by employing more time adverbials to make these distinctions.

Cohesive Ties in Year II

The first part of this section has dealt with cohesive ties used in expressing time and sequence of events. In this part we will take an in-depth look at the cohesive devices used by three writers during Year II. This discussion will include the writers' use of conjunction, but it will also consider Halliday's other four categories: reference, substitution, ellipsis, and lexical cohesion. Cohesive ties of reference are elements in the text which can be interpreted by referring to other elements in the text (e.g., Mary went to the movies and she ate popcorn.) In its simplest sense, substitution refers to the replacement of one item by another (e.g., My knife is dull. I must get another one.) Ellipsis refers to the omission of an item which can be retrieved from another part of the discourse (common in answers to yes/no questions, e.g., Did you go shopping? No.). Lexical cohesion is an effect achieved by the selection of vocabulary items which are semantically related (e.g., fruit, apple, orchard, pick, eat).

We will not fully explicate the cohesive ties in each text, but will focus on examples which typify each writer's style and/or demonstrate particularly interesting kinds of ties.

The three writers selected for this analysis, Elaine, Gordon, and Dana, were identified by their teacher as representing respectively one student from the lower third of the class, one average student, and one high-level student. In Year II, the six longest stories for each writer have been selected because we felt longer stories would provide more opportunities for the subjects to use cohesive ties. In our examples of the writer's texts, spelling and punctuation have been conventionalized.

Elaine

Recall that in the first three texts of Year I, Elaine's writing is charecterized by an abundant use of AND in its additive sense. In those texts, she also frequently uses general verbs. The first six stories in Year I are personal narratives. As Elaine moves into imaginative storytelling in the last six texts, AND is used much less frequently and she employs a listing format to relate details of her stories. In the text on 3/4/82, she moves away from both the use of AND and the listing format, and concentrates on creating events or episodes:

Elaine's Text 3/4/82

ONE DAY A GIRL WAS WALKING IN THE WOODS AND
A WOLF CAME OUT OF THE WOODS. SHE WAS GOING
TO HER GRANDMOTHER. THE WOLF WAS IN THE WOODS.
HE WENT TO HER GRANDMOTHER. HE WAS IN HER
GRANDMOTHER BED. HE GET HER.

Five of Elaine's longest texts in Year II are personal narrations that include her as a participant. In her story on 11/2/82, she seems to be describing two different events, each of which develops situations that are integral to but separable from the whole text. The first episode reads:

Elaine's Text 11/2/82

I WENT TO THE FUN HOUSE.
I GOT SCARED. THEN I STARTED TO CRY.
I WAS A GHOST. MY FRIEND WAS A GHOST
TOO. WE SCARED EVERYBODY AT THE
HOSPITAL. CHERI WAS A REAL WITCH.
WE WERE REAL GHOSTS. WE HAD PUMPKIN
PIE. WE ATE IT. IT WAS GOOD.

Although the word Halloween is never used, Elaine uses lexical cohesion in this text by selecting vocabulary items which are related semantically and are associated with a Halloween context: SCARED, CRY, GHOST, WITCH, GHOSTS, PUMPKIN PIE. She uses TOO for additive purposes, and THEN with both additive and causative functions, meaning AS A RESULT OF BEING SCARED, I STARTED TO CRY. Elaine's use of pronouns for reference is somewhat unclear. CHERI and MY FRIEND might refer to the same person, except that CHERI WAS A WITCH and MY FRIEND WAS A GHOST. What becomes difficult to resolve is whether WE includes the narrator and one or more additional participants in these phrases: EVERYBODY . . . WE WERE REAL GHOSTS . . . WE HAD A PUMPKIN PIE. Also, Elaine uses the definite article THE to refer to THE FUN HOUSE and THE HOSPITAL, without previously specifying any particular fun house or hospital for the reader.

The second episode in this text reads:

Elaine's Text 11/2/82

ME AND MS. WILDE WENT TO GO OUT TO EAT.

> THEN WE WENT TO GO WATCH A MOVIE.
> WE BOUGHT A POP AND SOME POPCORN.
> WE WATCHED "ANNIE." THEN WE WENT HOME.
> THEN WE WENT TO THE CARNIVAL.
> THE NEXT MORNING WE WENT TO THE CARNIVAL
> IN MS. WILDE'S CAR. MY MOM DID NOT
> LET ME USE OUR CAR TO GO.

Only two characters, ME AND MS. WILDE, are referred to until the last sentence, where MY MOM is introduced. Hence, the identity of WE is explicit throughout. AND is used as an additive conjunction twice, and THEN is used three times to convey the sequence in her chronicle of events at the movie. In the last sentence, she uses ellipsis, where TO GO means TO GO TO THE CARNIVAL.

Elaine's text on 12/7/82 relates another movie-going experience, but the referents of WE are never made explicit. Temporal relations are expressed through the use of THEN (four instances), ONE CHRISTMAS DAY, and THE NEXT MORNING. However, on lines 7 and 8, Elaine writes: THEN THE NEXT MORNING WE WENT TO GET SOME GIFTS FOR TONIGHT. THEN WE GAVE THE GIFTS OUT. The use of TONIGHT leads the reader to expect that gift-giving is an event yet to occur, but in the next line she reports the event as having occurred.

On 1/20/83 Elaine writes a lengthy piece which she titles THE DAY THE SIOUX CAME TO TOWN. This is the only text (in her six longest for Year II) that does not contain Elaine as a principal character. In it, she uses BECAUSE as a causal conjunction once, AND as an additive conjunction 17 times, and TOO as an additive 4 times. She uses past tense to briefly explain why the Sioux came to town and to describe a female dancer. In the third sentence, she begins to describe the Sioux and their apparel, and she uses present tense throughout her detailed reporting. She does not return to the events of the day, focusing instead on her descriptions. Elaine mentions THE SIOUX twice and THE MEN once; all other references to persons are accomplished through the use of pronouns. As a result, the specific identities of SHE and HE are unclear, though THEY consistently refers to THE SIOUX. (It should be noted, however, that she was writing about a picture, so that SHE and HE have exophoric referents.) Ellipsis is present in the following sentence: THE MEN WEAR MOCCASINS AND THE BOTTOM OF A DRESS AND HOLD A STICK. FEATHERS, TOO. Lexical cohesion is also important in tying events into a coherent piece of discourse. WEARS, DRESSES, MOCCASINS, FEATHERS, BELLS, BELT, and RIBBONS are related, as are PAINTS, RED, WHITE, and BLACK and are all lexical details which refer to the Sioux apparel. Elaine's ability to use reference over large chunks of text is evident. In the ninth sentence, she states: HE WEARS . . . A BLACK THING OVER HIS HEAD. Five lengthy sentences later, she uses THE THING ON HIS HEAD to refer to the BLACK THING she had mentioned earlier.

On 2/10/83A Elaine relates a third movie-going experience. This text is significant because it demonstrates her ability to use conjunctions in an adversative function. There are four instances of BUT, though the meaning of the last one is unclear.

Elaine's Text 2/10/83A
IT WAS SCARY BECAUSE A MAN WAS TRYING TO KILL A WOMAN. BUT HER SON WAS TRYING TO GET HIM, BUT HE BROKE HIS WRIST. AT NIGHT HER ROOM BEGAN TO SHAKE AND THE DOORS SLAMMED REAL HARD. BUT SHE WAS NOT SCARED. BUT ON THE FIRST PART SHE GOT POPPED IN THE MOUTH, AND ALL THE BLOOD WAS IN HER MOUTH.

The final BUT might imply that the character should have been scared because of what had happened to her in the first part of the movie. Or it may simply signal that this last sentence is an afterthought telling an event which happened earlier that she forgot to mention. BECAUSE is used as a causal conjunction, as is AND in AT NIGHT HER ROOM BEGAN TO SHAKE AND THE DOORS SLAMMED REAL HARD. In this context, AND means "as a result of which," and it also serves an additive function.

The identity of WE is again unclear, though once she mentions A MAN and A WOMAN, they are referred to thereafter with pronouns. However, the reference is disjoint because it is unclear whether the MAN or HER SON broke HIS WRIST.

Elaine's story entitled ME AND MY FRIENDS is notable for her effective use of ellipsis in dialogue:

Elaine's Text 2/10/83B
. . .THEN SHE SAID, "WHAT DO YOU WANT?"
I SAID, "CAN YOU PLAY?" SHE SAID, "YES."

YES elliptically refers to the question CAN YOU PLAY; each utterance in the dialogue presupposes an understanding of prior statements.

The sequence of events is well controlled in this story, as are the identities of the persons referred to with pronouns.

Elaine uses THEN seven times as event markers in her personal narrative on 4/14/83. The listing format she uses to relate the events is reminiscent of her writing in Year I and of her story on 12/7/82 in Year II. WE is used eight times, though she does not make this reference explicit. Her story begins with ONE DAY and concludes with THE END, a common feature in Elaine's writing. The temporal expression is well controlled, within both the descriptive events and dialogue.

Elaine's cohesive ties are characterized by an abundant use of additive and temporal conjunctions, though she occasionally demonstretes her ability to use causal and adversative conjunctions. She also shows a propensity for using pronominals as reference ties, but she commonly assumes the reader will know who WE are. She has exhibited the use of ellipsis, and she is especially adept at controlling this cohesive device in writing dialogue. Also, her choice of lexical items consistently serves to make her texts cohesive and coherent.

Gordon

In his text on 10/7/82, Gordon presents an imaginative story that takes place over two days:

Gordon's Text 10/7/82
PAC MAN IS EATING THE GHOST. . . THE GHOSTS
ARE SAYING, "HELP US." THE OTHER GHOST
IS SAYING, "I CAN'T." . . . THE NEXT DAY
PAC MAN TOOK BABY PAC MAN FOR A WALK IN
THE PARK. THEN THE GHOSTS WERE CHASING
PAC MAN AND BABY PAC MAN. BUT PAC MAN
AND BABY PAC MAN ATE THE GHOSTS UP.

The events of the first day are consistently related in the progressive verb tense. Gordon then signals the shift to the next day's events by stating THE NEXT DAY and using past tense (including one past progressive verb) for the final three lines of his story. In those final lines, he uses a temporal conjunction, THEN, and an adversative conjunction, BUT, to tie the events together.

Gordon uses the definite article THE in his first mention of GHOST, without previously specifying any particular ghost. Also, his use of comparative reference in THE OTHER GHOST implies that the reader has enough information from his text to differentiate among the ghosts he uses as characters.

Gordon's control over ellipsis in conversation is evident in this story. The phrase I CAN'T is interpreted as I CAN'T HELP YOU, building directly on the earlier request, HELP US.

On 11/2/82 Gordon writes an imaginary story that features himself as the main character. It opens with ONE HALLOWEEN NIGHT WHEN I WAS TRICK-OR-TREATING and proceeds to detail the events of that night. Gordon uses temporal and additive conjunctions to tie his text together:

Gordon's Text 11/2/82

. . . THEN IT STARTED TO CHASE ME. THEN I
RAN ALL THE WAY HOME BUT THERE WAS A JACK-O-
LANTERN. IT WAS LOOKING AT ME VERY MEAN.
THEN THE JACK-O-LANTERN WAS CHASING ME TOO.
THEN TWO THINGS WERE CHASING ME. THEN I GOT
TIRED OF RUNNING AND I FELL DOWN ON SOME GRASS
AND I FELL ASLEEP FOR 6 HOURS.

The entire story is told in past tense, and Gordon's use of pronominals, demonstratives, and articles is clear. For example, when he mentions TWO THINGS in sentence 7, it is obvious that he is referring to SCARECROW and JACK-O-LANTERN. Lexical cohesion is partly accomplished through selecting the words: CHASE, RAN, CHASING, TIRED, RUNNING, FELL DOWN, and FELL ASLEEP.

In the next story we've selected for analyzing Gordon's cohesive ties (12/2/82), he relates a series of events that take place over one year. He frequently uses AND as an additive conjunction, but he also uses BECAUSE as a causal conjunction and BUT as an adversative conjunction. AND is used as an adversative as well as an additive conjunction in the last sentence: I TRIED TO RIDE IT AND I FELL OFF BECAUSE I WAS NOT HANGING ON.

The story is told almost entirely in past tense, and Gordon flexibly marks the four time periods he is discussing by using these four phrases:

Gordon's Text 12/2/82

> ONE CHRISTMAS NIGHT I LEFT . . .
> THE NEXT DAY SANTA CAME BACK . . .
> FOR THE WHOLE NEXT YEAR I WAS GOOD . . .
> AND ONE CHRISTMAS EVEN NIGHT. . .

There is one line where Gordon doesn't use past tense: AND SANTA SAID THAT I WILL GET SOME PRESENTS IF I BE GOOD. His use of future tense here may arise from his awareness that conversation can be stated in present or future tense within a story told in past tense.

On 2/3/83 Gordon writes a story called AVALANCHE IN BETHLEHEM. In this story, Gordon exhibits good control over reference:

Gordon's Text 2/3/83

> THERE WAS ONCE A HIGH MOUNTAIN AND OVER THAT
> HIGH MOUNTAIN LIVED A LITTLE TOWN CALLED
> BETHLEHEM. IN ONE OF THE HOUSES LIVED A
> LADY AND A BOY NAMED MARY AND JESUS . . .

After these opening sentences, Gordon moves into a description of the events of a particular day: ONE DAY WHEN MARY WAS COOKING, SHE SAW A BUNDLE OF SNOW FALLING FROM THE MOUNTAIN. All pronominal references to MARY, JESUS, and the PEOPLE IN BETHLEHEM are clear.

Gordon opens his story on 3/24/83 with THERE WAS ONCE A BOY NAMED LITTLE KNIFE, and he proceeds to describe LITTLE KNIFE before relating what happened to this character on a particular day. This pattern is similar to the one Gordon uses on 2/3/83. LITTLE KNIFE is the only character referred to with a proper noun; his mother and father are not given names. As a result, this story makes greater use of pronominal reference than do his four earlier stories for Year II, and it is important to note how well he controls this aspect of cohesion:

Gordon's Text 3/24/83

> . . . LITTLE KNIFE GOT SCARED WHEN HIS FATHER
> SAID THAT HE COULD CARRY THE DEER WITH HIM.
> LITTLE KNIFE SAID, "FATHER, I AM NOT STRONG."
> "LITTLE KNIFE, " SAID HIS FATHER, "DON'T WORRY.

WHEN YOU PICK UP THAT DEER GOD WILL GIVE YOU POWER."

Gordon uses a variety of cohesive devices to tie this story together. AND is used as an additive conjunction, and BUT is used as an adversative. WHEN, ONE DAY, and FROM NOW ON are all used as causal and temporal expressions. Significantly, throughout this text he controls the use of present tense for conversation within a story told in past tense.

Gordon's story on 4/7/83 is titled THE DAY THE HOUSE BURNED DOWN, which cataphorically refers to A HOUSE mentioned in the first sentence. In the second sentence, he mentions that A BOY SAW THE FIRE AND CALLED THE FIRE DEPARTMENT. The boy is not referred to again, but Gordon refers to THE FIRE DEPARTMENT as THEY. Gordon also maintains clarity in pronominal references to the owner of the house: WHEN THE LADY THAT OWNED THE HOUSE SAW HER HOUSE BURNING SHE SAID, "WHAT IS GOING ON HERE?" ONE EVENING DAY, THEN, and WHEN are used to relate the sequence of events, and AND is used as an additive conjunction.

Gordon's writing in Year II demonstrates his control over consistency in verb tense and pronominal reference. The events in his stories often take place over time periods longer than one day, and he is able to distinguish among those time periods through the appropriate use of temporal adverbials and conjunctions and to link events and episodes together to create coherent text.

Dana

Two of Dana's six longest stories in Year II are imaginative stories that do not include him as a character, two are personal narratives of actual events, and two include an imaginative story within the context of a personal narrative.

On 11/10/82 Dana writes an imaginative story called THE DAISY, in which he uses an interesting sentence pattern to relate the events:

Dana's Text 11/10/82

THE MAN TRIED TO PULL THE DAISY OUT.
THEN HE TRIED TO CUT THE DAISY WITH HIS SCISSORS.
BUT THE SCISSORS GOT CAUGHT.
THE MAN TRIED TO PULL HIS SCISSORS OUT.
WHEN HE PULLED THEM OUT THEY WERE BENT.
THEN HE TRIED TO SAW THE FLOWER DOWN.
BUT THE EDGE GOT SOFT.
THEN HE TRIED TO FLATTEN THE DAISY WITH A BIG
TRACTOR-LIKE THING.
BUT THAT DIDN'T WORK.
THEN HE TRIED TO PULL THE ROOTS OUT.
BUT THE ROOT WAS LONG.
THEN HE TRIED TO BLOW THE DAISY UP.
BUT HE BLEW HIMSELF UP.
THEN A LITTLE GIRL GOT IT AND PULLED IT VERY GENTLY
AND IT CAME OFF.

The alternation of BUT (an adversative conjunction) and THEN (a temporal and additive conjunction) creates a text that resembles a good news/bad news style of narration. A MAN is used in the first sentence, and the next two references to this character use THE MAN. Thereafter, HE is almost exclusively used. IT consistently refers to THE DAISY. Lexical cohesion is partly provided by the repetition of TRIED (7 instances) and the relationships among the following words: WEEDS, DAISY, FLOWER, ROOTS. Also related are the words: CUTTING, PULL, CUT, SCISSORS, SAW, FLATTEN.

Dana writes a personal narrative about his experiences at a rodeo in his next text. Three different rodeo performers are mentioned; Dana refers to two of them as A MAN and to the third as A KID when he introduces them:

Dana's Text 11/17/82

> WHEN I GOT TO THE RODEO, A MAN WAS GETTING
> BUCKED OFF A WILD HORSE. . . A MAN NAMED
> HARRINGTON NARCHO WAS FIRST. . . A KID FROM
> ALABAMA WAS FIRST. . .

Even though three male characters are included, Dana so well controls the cohesive ties of reference that the reader is not confused about the identity of HE or HIS wherever they appear in the story.

A variety of temporal expressions are also used effectively in this text: ONE DAY, WHEN, BEFORE, THEN, FIRST, LAST BUT NOT LEAST, and AFTER.

Temporal expressions are controlled somewhat differently in Dana's story called PAPAGO LEGENDS. The text begins like a personal narrative, but moves into the telling of a legend:

Dana's Text 1/26/83

> ONE DAY MY GRANDFATHER TOLD ME A LEGEND.
> IT WAS ABOUT AN EAGLE. THE EAGLE HAD A
> BABY BIRD. THE BABY BIRD LOOKED CUTE.
> THE MOTHER ONE DAY HAD TO GO GET SOME
> FOOD FOR HER BABY . . .THEN ONE DAY SHE
> FOUND OUT THAT WOLF HAD HER BABY . . .

The first ONE DAY refers to a day in the life of the narrator; the second two refer to days in the life of the legendary characters. The first ONE DAY is also reminiscent of a conventional beginning found in many North American Indian narratives, in which the narrator acknowledges the source of his or her story before beginning the performance of the narrative. Another interesting feature in this story is Dana's use of AN EAGLE, then THE EAGLE, and finally EAGLE. While it is not until near the end of the story that Dana elects to use EAGLE as a name, and it may have been prompted by his use of WOLF as a name earlier in the story: A WOLF HAD TAKEN HER BABY BIRD . . . SHE FOUND

OUT THAT WOLF HAD HER BABY.

Although the title of this story contains the specific mention that PAPAGO LEGENDS are the subject for Dana's text, Dana does not make explicit the relationship between PAPAGO and his GRANDFATHER, although he does use the conventional beginning, ONE DAY MY GRANDFATHER TOLD ME A LEGEND.

A similar feature exists in the next story we've selected for :

Dana's Text 2/9/83

> THE WILLIAM TELL STORY.
> THE MOVIE WAS ABOUT A GREAT MAN. WELL, ONE
> DAY WILLIAM WAS FIXING . . .

A GREAT MAN is an anaphoric reference to the WILLIAM TELL of the title. WILLIAM TELL is subsequently referred to as WILLIAM or HE, and is included in some uses of THEY. Beginning the story with THE MOVIE presupposes that the reader knows THE WILLIAM TELL STORY is the title of a movie Dana saw, not merely the title of his story. His transition into the events of the movie is accomplished through stating WELL, a rare use of a continuative conjunction in our subjects' writing.

Temporal features are expressed with a variety of words: ONE DAY, WHEN, SO, THEN, GETTING DARK, AFTER. This very long story (238 words) contains several characters and Dana has some difficulty controlling the pronoun reference. For example:

Dana's Text 2/9/83

> . . . WHEN THEY GOT HOME THEY ALL CELEBRATED
> HIS BIRTHDAY AND ON THE SAME NIGHT HELD THE
> MEETING. ONE OF THEM WAS A TRAITOR. SO HE
> TOLD THEIR MASTER. AFTER HE HAD HEARD, HE SAID,
> "STAND UP POLE WITH MY HAT ON IT." . . .

The first use of THEY refers to William and his father, but THEY ALL may be a catapohoric reference to THE TOWNSPEOPLE mentioned at the end of the text. ONE OF THEM probably refers to ONE OF THE TOWNSPEOPLE, but it is unclear whether this person is referred to in HE TOLD. Also, it is difficult to determine who is being referred to as THEIR MASTER.

Dana controls demonstrative reference fairly well throughout this text. In the second and third sentence, mention is made of A MEETING. Twelve sentences later, he refers to THE MEETING. The use of ellipsis is also evident in Dana's writing of dialogue:

Dana's Text 2/9/83

> . . . HE SAID, "CAN YOU COME TO A MEETING
> TONIGHT?" WILLIAM SAID, "NO, BECAUSE IT'S
> MY SON'S BIRTHDAY." . . .

In this context, NO means NO I CANNOT COME TO A MEETING TONIGHT.

Dana also uses a nominal substitution in the sentence: THEY WERE MEAN MEN, ESPECIALLY THE ONE IN THE WAGON, where ONE is substituted for MEAN MAN.

In his text on 2/23/83, Dana relates what purports to be an actual event. The story contains a lengthy list of items which the narrator put into soup for his enemy:

Dana's Text 2/23/83

> . . . I PUT 1 TOAD LEG, 2 LIZARD TAILS,
> 4 EYEBALLS, 3 FIRED WORMS, 2 CATERPILLARS,
> 7 RABBIT'S HEARTS, 2 DEER'S GUTS, 2 BAT WINGS,
> 3 POISONED SNAKES AND 10 HOT COALS, AND 3 CANS
> OF HOT SAUCE IN THE SOUP.

In contrast to the way writers like Elaine often employ AND repeatedly when listing events or items, Dana has restricted his use of AND. It is used to connect the last three items on his list of soup ingredients: 3 POISONED SNAKES AND 10 HOT COALS, AND 3 CANS OF HOT SAUCE. The same pattern for AND is used in his description of dessert: 2 CAT'S EARS AND A CAN OF SHAVING CREAM, AND A CHERRY.

BUT is used as an adversative conjunction, and BECAUSE is used as a causal conjunction. Only two characters are present in most of this story, and Dana has good control over all pronominal references.

In relating the experience of going to a museum, Dana at two points employs a listing format:

Dana's Text 4/13/83

> . . . THEN WE WENT AND GOT SOME ROCKS.
> THEN WE WENT TO THE BEAVER AND OTTER EXHIBIT.
> . . . WE SAW BEAVER TRAPS AND SKINS. WE SAW
> THE BIRDS NEXT. AFTER THAT WE SAW A BEAR.
> THEN WE SAW A JACKRABBIT AND WILD PIG. THEN
> WE SAW A WOLF, DEER, SKUNK, AND BABY RED WOLVES.
> THEN WE SAW ALL KINDS OF SNAKES . . .

Dana's control over the sequence of events is apparent in his use of FIRST, THEN, NEXT, AFTER, and LAST. Dana refers to WE throughout, although who WE refers to is not made explicit.

Dana's often lengthy texts demonstrate his ability to control temporal features, verb tense, the variety of uses of conjunction, substitution, ellipsis, and lexical cohesion. He is able to use pronominal reference clearly in all but the most complicated texts, and he uses demonstrative reference and definite articles effectively.

Conclusions

Although with greater or lesser degrees of control over the various features we've selected for discussion, all our subjects provide evidence that they are competent English language users who control many complex features of English in their evolution of texts. Our analysis of the types of cohesion found in the writing of our subejcts provides information on how our third and fourth graders create meaning in written language and points to developmental trends which will be examined in more depth at a later date. Our writers are aware of the function of cohesive devices as event markers in text construction and demonstrate flexibility in using these cohesive ties for varied purposes.

Contractions

with Ann Marek

During the course of our analysis, we became aware that relatively few instances of contractions appear in our data. We wondered whether this might reflect students' awareness of the differences between written and oral language. This fact led us to compare the frequency of contraction use in children's speech, writing, and reading material. David Freeman, a linguistics graduate student, (1983) has begun a study comparing contraction use between children's spontaneous speech and basal reader stories which we compared with an analysis of our subjects' writing of contractions.

The oral language contraction data was collected from four second-grade children during their oral retellings of SKY DOG, a story they had just read. These children speak a dialect of English known as Down-East Maine and were part of a miscue analysis research study. (Goodman and Goodman, 1978) Five second-grade level basal reader stories were also analyzed for their inclusion of contractions. The Papago children who are the subjects of this research provided the writing data. Freeman's study limits the definition of contraction to include traditional contractions formed by inserting an apostrope and omitting certain letters form the second word (usually BE forms, auxiliary verbs, or NOT). He did not include contracted forms like WANNA or GONNA.

Analysis of the tape-recorded retellings reveals that the four children average 25 contractions in about 600 words, representing about 4% of their spontaneous speech. However, the text of the story they were retelling, SKY DOG, only contains 14 contractions in 600 words, or 2% of the total words. An examination of the five basal stories together shows an average of 12 different contrections per story, and those contractions are used in about 2% of the total words. In basal stories, nearly all the contractions appear in dialogue.

In the writing of our research subjects, 84 contractions are used in approximately 17,000 words, representing .05% of the total words. This is about one-fourth of the contractions used in basal stories and one-eighth of the number used in spontaneous speech. Across all three forms of discourse, oral retellings, basal text written language, and our subject-authored writings, NOT and BE forms are most commonly involved in the contractions, each comprising about one-third of the DIFFERENT contractions used by each speaker or writer.

It is clear from our data that children use contractions even less frequently in their writing (.05%) than basal readers do (2%). Yet, children in their spontaneous speech use contractions about twice as frequently as basal readers do (4%). The fact that our children use contractions on 84 occasions suggests that they DO control this form, but that they are electing not to use it in much of their writing. It may be that their writing reflects a growing awareness that contractions are used less frequently in writing than in speech. According to Frank Smith, reading seems

> ...to be the essential fundamental source of knowledge about writing, from the conventions of transcription to the subtle differences of register and discourse structures in various genres...There is evidence that many children are sensitive to constructions of written language before they can write or even read for themselves...Individuals learning to write, especially if highly motivated, may in fact demonstrate too much sensitivity to particular aspects of written language (Smith, 1982, p. 177 and 191).

In her text on 3/30/82, Jean has chosen to use the full form of I WOULD rather than I'D, which when combined with the subjunctive IF gives her text a literary quality often characteristic of written language: IF I LIVED IN SWITZERLAND I WOULD CLIMB THE MOUNTAIN...I WOULD BLOW A HORN.

It seems reasonable to hypothesize that these children are attempting to approximate the written language register they have become aware of through their reading.

Further analysis will reveal whether the majority of their contractions are contained in dialogue, as is the case in basal readers.

Dialect

Every language is made up of a collection of dialects which vary to different degrees from each other. In this report the term Papago English will refer to the dialect of English spoken by most of the Papagos in Southwest Arizona. A literature search has not revealed any information on Papago English. Since we did not have a reference to help identify specific features of Papago English, we used insights from miscue analysis research on dialect features with various English speakers (Goodman and Goodman, 1978) and knowledge about language variation in general, and began to flag distinctive features of English when they occurred in the writing of our subjects. Many of the Papago English features coded as dialect are similar to features considered to be social class dialects of oral English in more general use across English dialect groups. In addition, we also flagged features which seemed unique or unusual to us in the subjects' writing in order to explore whether such features were dialect, idiolect or some unusual use of a linguistic feature.

We used audiotapes of subjects reading their own stories when necessary to help decision-making about dialect. After a story was written, the researcher asked the child to read the story onto a tape recorder. We used the oral reading on the audiotapes to disambiguate syntactic, spelling and dialect questions. For example, a child might have written EAT in a past tense slot but read it as ATE. We did not code EAT as dialect if the writer read ATE; the word would be coded as an invented spelling. However, if the child read EAT as EAT in a past tense slot, then it would be considered a conventional spelling and coded as dialect (See section on irregular verbs).

Towards the end of our data collection and analysis of dialect features, we used the consultant services of Ofelia Zepeda, a Papago linguist and a native speaker of Papago and Papago English. We presented our preliminary conclusions to her and relied on her professional and personal judgments about the features we had coded as dialect. In the few cases when she rejected a feature, we discarded it as possible dialect. However, when she was not immediately willing to reject a feature we retained it as a possible feature of Papago English. Those examples will be discussed specifically as we present the data.

In all of the writing analyzed, the subjects produced 1.7 features that were coded as dialect for every 100 words they wrote in Year I and 1.1 dialect features per hundred words during Year II. Although all of our subjects produce, in their writing some of the features coded as dialect, most subjects also produce most of these same features in conventional non-dialect forms at some point in their writing. This suggests that within this English speaking community all of our subjects control to some degree what is conventional in written language and what reflects more formal uses of English. This result supports other dialect research which shows patterns of variability within both oral and written language of various dialect groups in the U.S. (Wolfram and Fasold, 1974; Goodman and Goodman, 1978, Rigg 1974, Shaughnessy, 1977).

The degree of control and the amount of consistency within any one subject and among all of the subjects in this study must await greater knowledge of Papago English and more in-depth analysis. In most cases, we have not analyzed the ratio of dialect features to the opportunity for such features to occur; i.e, we do not match how many times the subjects or any one subject produce a particular dialect feature with the number of times they produce the same form conventionally. This will ultimately be done by us in further analyses of this data but is beyond the scope of the present report. In the few cases where we make some attempts at such an analysis, we will explain the procedures. We also have not compared the written language features with the taped oral language samples of the children except in cases where we needed to disambiguate dialect forms as described earlier.

Other than the decrease in mean number of dialect features from Year I to Year II there do not seem to be any developmental patterns which can be reported. The main reason for little change across time in any feature however may simply reflect the small numbers of dialect features reflected in the children's writing.

The dialect features are organized around four systems of language: the phonological, the morphological, the syntactic, and the semantic. These are categorized in Table IV-17.

Table IV-17 Papago English Dialect Features

Phonological	Morphological	Syntactic	Semantic
A/AN	verbs	subject/object relationships	WENT
spelling	nouns	subject/verb agreement	GOT/HAS
alternative forms	adverbs LY endings	TO BE forms	idiosyncrasies
		deictics	

Phonological

A/AN

One dialect phonological feature represented most commonly by all of the subjects was the use of A for AN prior to words which begin with a vowel. Occasions where AN would be the expected determiner (prior to words beginning with a vowel) occurred 30 times in the two years for all subjects. There were eight conventional uses, two problems with AN which were not dialect related, and twenty times where

A was written for AN (67% of possible uses). Eight out of ten subjects produced this feature in Year I and three subjects out of six produced this feature in Year II. The AN was produced conventionally eight times by four different subjects, but only twice in Year I and the other six times in Year II. Mike produced both the conventional form and A for AN during his two opportunities to produce AN in Year I. He was not in the study during Year II. Rachel produced A for AN twice in Year I and produced one conventional AN in Year II. Dana produced A for AN twice in Year I and once in Year II, but he also produced the conventional form in Year II five times.

Interestingly, in Dana's 2-9-83 text he used AN where A is conventional, in addition to using AN unconventionally:

Dana's Text 2-9-83

> WELL ONE DAY WILLIAM WAS FIXING AN BOW
> AND ARROW FOR HIS SON'S BIRTHDAY...THEY
> MADE HIM SHOOT AN APPLE OFF HIS SON'S
> HEAD.

Elaine produced one conventional form in Year I, and produced A for AN six times that year. In Year II, Elaine produced A for AN on one occasion. Vincent produced only dialect forms both years. In the examination of this one dialect feature, it is possible to see the patterns of variability within the written language of this English speaking community. There are not enough opportunities for using AN to be able to come to any conclusions about when students use A and when they use AN conventionally. However, the case can be made that the standard form is coming into use in the writing of these students since the use of conventional AN is more frequent in Year II than in Year I. We can't say, however whether the shift is happening in both oral and written language or only in written.

Spelling

The influence of the subjects' phonological system on their spelling will be discussed in greater depth under the orthography section of this report. It is mentioned here in order to indicate our awareness that oral phonological features of dialect are one of the language repertoires that have influence on invented spellings.

Alternative forms

There was one spelling of SOMETIME/SOMETIMES. Dr. Zepeda believes that both can occur interchangeably in Papago English and may be inconsistent within any one speaker in this community. This is the case for the use of SOMETIME for SOMETIMES in some other American English dialects as well.

Morphological

All the morphological features which were coded as dialect are similar to those found in other dialect studies (Wolfram and Fasold, 1974; Goodman and Goodman, 1978).

Verbs

Past Tense Verbs

Subjects represent past tense verbs occasionally by omitting the ED. (See discussion under the spelling section n this chapter.) But all the subjects produce the past tense form with the conventional ED ending in more cases than they omit it. For example, LOOKED was written twenty times in two years and spelled with an appropriate ED ending 70% of the time. A few subjects produced the past tense ED verb form conventionally most of the time.

At the same time that the subjects omit ED forms some of the subjects actually overgeneralize and regularize the pattern of irregular past tense verbs. Dana, who spelled FINISH for FINISHED in Year II, also produced BENDED for BENT that year. Rachel, who omitted many ED's in Year II, also produced PUTED for PUT during that year. These are the only examples of overgeneralizations in the two years of data, but they provide additional evidence that these subjects have the competence to produce the conventional past tense form of verbs even though they inconsistently omit it during the evolution of their finished text.

Irregular verbs

Irregular verbs also reflect dialect features. It was obvious by examining the use of regular past tense forms, adverbial phrases, and clauses of time, as well as story context, that the subjects commonly used past tense. But in some past tense situations the subjects occasionally used simple present tense, forms of irregular verbs where the past tense would be conventional. Wolfram and Fasold report on these verbs, as they occur in Vernacular Black English and White Non-standard English (Wolfram and Fasold, 1974, p. 151). They conclude that this feature is not very widespread among the dialect speakers they studied. This conclusion is true for our subjects as well. The following simple forms were used in past tense positions in this study: BLOW, DIG, GET, GO, KEEP, TELL, THROW, DRINK, BEGIN, FALL, FIND, RUN, EAT, BRING and COME.

Only the last three were produced by more than one subject more than one time. Elaine used EAT for ATE four times in Year I while Gordon produced it only once in Year II. BRING for BROUGHT was used by both Gordon and Elaine once in Year II. COME was used for CAME by three different subjects. Vincent and Elaine used it once in Year I and Mary used it twice that year.

Since COME was used by the greatest number of subjects and both COME and CAME occur somewhat frequently in the data compared to other irregular verbs, it will be examined in depth.

CAME, used 67 times, was the 43rd most frequent word used by all the subjects during the two years combined. It was spelled conventionally 96% of the time. COME was used 20 times during the two years and spelled conventionally 85% of the time. Given frequency and percent of conventional spellings it seems that CAME is well controlled by the subjects. The fact that they did use COME for CAME in some contexts, therefore, suggests the strong force of language choice.

The three subjects who produced COME for CAME during Year I used CAME conventionally 22 times and COME conventionally 6 times (this refers to syntactic convention, not spelling). Four times COME was used when CAME might be considered conventional, especially in writing.

The environments for each form follow for each subject. (Spelling has been conventionalized for the reader throughout this section on dialect. Ellipses indicate missing text.)

Vincent's Text 2/4/82

> ONCE THERE WAS...THERE WAS A MOUNTAIN...THERE WERE A LOTS OF MEN... BUT ONE DAY THE PIRATES COME AND GOT GOLD AND WENT BACK...

Elaine's Text 5/11/82

> I WENT...BEFORE THE CARS CAME..WENT HOME... I WENT IN...I CLEANED MY ROOM... WHEN MY MOM COME HOME SHE SAID..MY AUNTIES CAME AFTER ME...SHE TOOK ME

Mary's Text 11/3/81

> COWBOY IS GOING...HE IS GOING... HE FOUND...IT WAS GETTING...IS EATING FOOD...IS GOING TO GO...IT GOT DARK AND THE MOON COME OUT AND THE FOX COME OUT AND RAN AROUND

Although Mary's story finds COME used in a present progessive tense text but in a sentence with other past tense verbs, the other two texts use the past tense throughout. This information adds to the data on COME/CAME but sheds little light on why this phenomenon occurs. It supports studies by Fasold, Labov et al., Wolfram, and Hackenberg that the use of "a present tense form in a past context was quite rare and that there were no individual speakers who did not use the standard irregular or past forms most of the time" (Wolfram and Fasold, 1974 p. 151). It also strongly shows that the use of simple present tense forms in past tense contexts occurs for some past tense irregular forms but not for all.

Third Person Singular Verbs

The third person singular form of the verb seems to be produced more conventionally than the past tense ED form. However the complexity of arriving at this tentative conclusion can be seen by viewing data related to the root words of LIKE and LOOK. (Table IV-18)

Table IV-18
Comparison of Past Tense Regular and Third Person Singular Verb Forms

Words	Total Occurrence	Conv. Endings	Omitted Ending
likes	6	3	3
liked	19	11	8
looks	3	3	0
looked	20	15	5

In most cases the past tense form is used to a much greater degree than the third person singular, so comparison data is difficult. LIKES is proportionately less conventional than LIKED; many third person singular forms (like LOOKS) have 100% conventionally spelled endings, while almost all forms ending in ED have at least a few omitted ED endings. In addition, although six different subjects were involved in the omission of ED on LOOKED and LIKED, only two subjects omitted the S's on LIKES and LOOKS.

Nouns

It seems as if there is more tendency to omit the S in plural positions than the S in third person singular. Only two subjects omitted the S in third person singular forms, while seven different subjects omitted S's on plural forms.

Only one subject omitted an S from the 71 possessive S forms in the data. That contrasts sharply with studies of Black dialect speakers (Wolfram and Fasold, 1974). For our subjects the majority of nouns had a conventional S ending produced by these subjects.

Adverbs (LY endings)

In a number of English speaking dialects the LY is omitted from the base in adverbs. Wolfram and Fasold quote Mencken's classical description of American English.

> In both <American common speech and the vulgar dialects of the British Isles> one encounters the double negative, the use of the adjective as an adverb....(Wolfram and Fasold, p. 27)

Adverbs occur less in English in most contexts than other word classes (Goodman and Burke, 1973) and the LY ending on adverbs occurred very few times in our subjects' writing. The subjects in this study in most cases used the LY conventionally although two subjects omitted the LY only on certain words. It may be that certain adverbs may have obligatory LY endings while others may be optional, either for any one language user or within a dialect community. It doesn't seem likely that anyone would say THE GAME WAS FINAL OVER.

In this study our writers use the LY conventionally in such words as ACIGDETLY (accidently), ESPECCILEY (especially), GENTLY and FINALLY. The first three were each produced once and the last one was used five times. HAPPILY was used conventionally four times and HAPPY was produced once in an adverb position. KUEL (QUICKLY) was used once and was read as QUICKLY by the subject. One subject used SAFE in an adverbial position three times.

Elaine's Text 5/11/82
ONE DAY I WAS RIDING SAFE ON MY BICYCLE...
I WENT HOME SAFE...
I WENT TO MY AUNTIE'S HOUSE SAFE AND I...

REALLY occurred more frequently than other LY adverbs and will therefore be examined in depth. REALLY was difficult to analyze since it was spelled unconventionally every time it was produced. It was considered to be REALLY under two conditions: (1) there was an LY at the end of the written word (REALY, RALLY, REACLY), or (2) the writers read REALLY when they reread their stories aloud at the end of the writing episode.

Seven subjects used REALLY in a total of twelve different texts during the two years. Three subjects used REALLY five times in adverbial positions and never used REAL in an adverbial position.

Two subjects used REAL only once in adverbial positions and never used REALLY. Two subjects used both REALLY and REAL in adverb positions and provide interesting contrasts.

Mary's Text 2/2/82
AND I REALLY GOT SCARED.

Anna's texts were also both in Year I:

Anna's Text 10/29/81
I REALLY LIKED IT. OUR CLASS WAS
SCARED, REAL SCARED. IT REALLY WAS SCARY.

Anna's Text 3/30/82
THEY ARE HILLY. THEY ARE NOT LIKE
OURS. REALLY SOMETHING.

These examples show the difficulty of using the simple issue of grammatical function slots to make conclusions about dialect. Contrary to Mencken's conclusions it is obvious that the subjects are not simply using adjectives in adverbial positions. The slots considered above could all take REALLY in some dialects of English, and they all function as adverbs. However, these writers seem to use REAL only in linguistic environments where VERY could be substituted and not in other environments. Keep in mind that some subjects do use REALLY in such slots. Examples from other students verify this selected use of REAL.

Mary's Text 2/2/82
IT IS REAL (VERY) BIG

Anna's Text 10/29/81
OUR CLASS WAS SCARED, REAL
(VERY) SCARED

Elaine's Text 2/10/83
...THE DOORS SLAMMED REAL
(VERY) HARD

Elaine's Text 2/9/83
...A HIPPOPOTOMUS WAS
REAL (VERY) SKINNY

Again a very sophisticated understanding of English on the part of the subjects is evident. They demonstrate a high degree of selectivity in producing dialect features.

Syntactic

Subject/Object Relationships

One syntactic feature which occurred in the written texts of our subjects is the use of objective case pronouns in subject positions. Jean produced the only example of a third person case pronoun in a subject position in Year I: HIM AND ANOTHER COWBOY GOT IN A FIGHT.

The use of the first person pronoun ME in the first position of a combined subject is the most common use of objective case pronouns in subjective positions. Six out of the ten subjects produced this form (see examples below) in both Years I and II. Dana produced one such form in one story; Gordon produced three in one story; Mary two in one story. Elaine produced one in each of five different stories. Anna had the most complex pattern using the form in three different stories; once in one of her stories, twice in another story, and three times in a third story she uses the same form in both subject and object positions.

Gordon's Text 4/14/83
THE DAY ME AND MICHAEL WENT TO THE UNIVERSITY.

IT WAS APRIL THE 13, WHEN WE WENT TO LUNCH. THEN
THE RESEARCHERS CAME AND ME AND MICHAEL
HAD TO GO TO TUCSON...WHEN WE GOT THERE WE WENT...
WE WENT TO ALL THE BUILDINGS...THEN ME AND
MICHAEL PLAYED...

Mary's Text 2/2/82

I WENT TO A CASTLE...I WENT TO KNOCK ON THE DOOR...
ME AND PRINCESS WENT INTO THE CASTLE...ME AND
PRINCESS WERE SCARED AND WE WENT HOME

Anna's Text 3/24/83

...AND I GOT 100,000 DOLLARS...I WAS
SO HAPPY...I GOT TWO TICKETS TO HAWAII...ME AND MY
FRIEND HAD SO MUCH FUN...WHEN ME AND MY FRIEND GOT
BACK...FROM THEN ON NOBODY HAS SEEN ME AND MY FRIEND.

Vincent produced the only use of me in the second noun position of a combined subject

Vincent's Text 4/27/82

THIS MORNING MY WHOLE CLASS AND ME GOT TO SEE
IT ERUPT...ON 4/5/83 WE WENT TO A FIELD
TRIP...

None of the other double subjects included had a modified noun phrase where the subject was a group (like CLASS). The other double subjects were pronouns plus single animate or proper nouns. In addition to the above examples the subjects produced the following: ME AND JOHNNY; ME AND PRINCESS; ME AND MY COUSIN; ME AND MISS [illegible]ON. It may be that in the kind of structure Vincent used it is permissible to use ME in the second position of the combined subject.

A selected search was made to see if any of the subjects ever used the more conventional double subject with the first person I occurring as the second noun in a compound subject. We did not at this time look at every use of I in the total corpus. However, I is the third-ranked word in frequency in the data; it is used by the subjects 583 times, which represents 3.5% of the running words in the subjects' written texts. At a later date we hope to examine each position where I occurred to see if any subject ever used I as part of a combined subject.

Our selected search revealed no instance of the subjective case pronoun I in the second position of a combined subject structure. We also selectively examined stories by those subjects who did not produce the ME-PLUS-NOUN structure. In addition, we examined one-third of all the pieces of writing in this data. As we read compositions for other purposes we kept looking for the I-PLUS-NOUN feature. We didn't find one instance of this feature. We cannot say that this feature never occurs in the data; however, if it does, frequecny of occurrence is likely to be minimal in comparison to the use of the ME-PLUS-NOUN form.

This feature, which occurs in the oral language of these children, may be the most consistently used dialect feature in their writing. We have evidence from other studies that both NOUN-PLUS-I and ME-PLUS-NOUN are used in other children's writing (Milz, 1983; Graves, 1982). However, the latter form is quite common in the oral language of many dialect groups in the U.S. Additional research on this feature would reveal whether this is dialect specific or oral language specific, and/or whether it changes developmentally across time. For the subjects in this study no changes in this feature were noted across the two years.

Subject/Verb Agreement

Lack of conventional agreement between subject and verb was evident in the writing of these subjects. Again the instances of occurrences for this feature were small and varied inconsistently within and across subjects.

One lack of agreement between subject/verb was the use of DON'T for DOESN'T. Only two opportunities for DOESN'T occurred in the whole study and Jean and Mike use DON'T in each case.

Jean's Text 11/17/81
I HOPE IT DON'T HAPPEN TO YOU.

Mike's Text 11/17/81
I HOPE YOUR OTHER SON DON'T GET KILLED

The most common agreement issue is related to the uses of WAS for WERE and IS for ARE. Five different subjects produced either one or the other substitution, and one produced both. This particular agreement issue is not related to Papago English only. It is documented among many dialect groups and is often mentioned as a writing problem (Shaughnessy, 1977, p. 115). Certainly in the writing of dissertations and reports like this one the agreement issue is often mentioned.

Our subjects do use ARE and WERE conventionally. ARE is used 56 times and WERE 85 times during the two years by all the subjects. What seems significant is the complicated relationship of THERE with WAS and WERE which can be seen in Vincent's examples. Vincent had the largest number of WAS/WERE agreement features coded as dialect.

Vincent's Text 2/4/82
ONCE THERE WAS SOME PIRATE ON SEA. ...AND THERE
WERE A LOTS OF MEN WHO WERE TRYING TO CLIMB THE
MOUNTAIN...

Vincent's Text 10/27/82
THERE WAS TWO BIRDS. THERE WAS ONLY A LITTLE
TREES UP IN THE MOUNTAIN. IT LOOKED LIKE THE
BIRDS WERE GOING TO EAT THE LAMB. THERE WAS
FOOT PRINTS.

Vincent's Text 4/13/83
THE FIRST THING WE SAW WAS SOME GRAY WOLVES.
THERE WAS ONLY 2 DUCKS IN THE WATER

Vincent provides evidence of an inconsistent use of dialect features. He uses WERE with plural subjects in some settings but not in others. It is interesting to note Vincent's text 2/4/82; THERE WERE A LOTS OF MEN WHO WERE... In this text Vincent anticipates plural subjects followed by a phrase beginning with A which usually introduces singularity. However A can also introduce a mass noun such as LOT. Choosing the proper form of the verb TO BE in a sentence of this type can be problematic even for adult writers of English.

TO BE forms

The omission of the copula or the auxiliary form of TO BE in either full or contracted form occurred rarely in these subjects. Three subjects did, however, omit the forms at least once and one of the three produced such a structure three times. The fact that such an omission occurred rarely can be concluded by examining other data. AM is used in the study 40 times conventionally; WAS is used 478 times; ARE is used 56 times; IS is used 149 times, all conventionally. These features were not individually examined for their grammatical function. I'M and THAT'S are used 3 times conventionally and WE'RE is used once.

This data shows not only that the inclusion of these forms is a prominent feature in the written dialect of these children but also that full forms are much more prevalent than contracted forms in their writing. Are these subjects already showing an awareness that contractions are to be used sparingly in written English? We suggest this as a hypothesis at this time but need to examine our data more carefully for a more definitive answer. We also need to discover the nature of the relationship between this observance and subjects' oral language.

The only subject who omitted the TO BE forms more than once also demonstrated her ability to use them conventionally. The examples below represent all the omissions in the study. One of Mary's examples shows both her omission and inclusion of a single form in the same story. Anna's example is the only omission of WAS and the only example of an omission of a form that can't be contracted.

Mary's Text 1/14/82
HE GOING TO EAT THE WORM
...AND HE GOING TO EAT LOTS OF IT.

Mary's Text 1/21/82
THEY COULD CLIMB IT. IT IS REAL BIG.
...IT TOO BIG FOR ME TO CLIMB IT.

Mark's Text 2/11/82
THEY TRIED IT AND THAT WHY RABBITS HOP

Anna's Text 10/29/81
OUR CLASS WAS SCARED. REAL SCARED
IT GOOD, IT WAS FUN.

Deictics

THOSE is used as a daictic prior to common nouns in English as Rachel shows in the following example.

Rachel's Text 2/9/83
...AND HIS FATHER SAID "WHO WERE THOSE PEOPLE?

In oral Papago English, however, it is acceptable to use THOSE as a deictic with proper nouns. We had two examples by two subjects in the data collected for this study.

Anna's Text 4/14/83
WE WENT TO PICK UP THOSE MARK GORDON VINCENT
DANA AND MISS. KASTEN

Anna's Text 9/15/82
AFTER THAT WE WATCHED T.V. THEN THOSE DELMARIE
CAME. WE PLAYED FOOTBALL FOR AN HOUR.

Semantic

Our data on the semantic system shows more idiosyncratic dialect features than in the phonological, morphological, or syntactic systems.

That is, one or two subjects produce the structures coded as dialect only once or twice. These seem to be features which may be part of oral Papago English according to our consultant. They are examined below, one feature at a time.

As we examined dialect features, it became evident that one oral language feature which we noticed frequently in our oral interactions with the subjects occurred only once in their writing. We often heard the children use SURE as an intensifier such as: This is SURE good Although this is also a feature of most oral English dialects, it is its frequency of use that makes it distinctive in Papago English. Vernon was the only subject who used it in writing, and he only produced it once.

Vernon's Text 2/16/83
I SURE WISH OR HOPE I AM GOING TO BE ONE WHEN
I GROW UP.

We are unable to conclude whether there was a lack of opportunity for the subjects to use this form or whether they are beginning to sense that such a feature is not used in formal uses of written language. We tend to believe the latter, since such a notion seems to be reflected for other dialect features as well. More work needs to be done to determine the occurrence of various dialect features in oral language and the occurrence of alternative options in both written and oral Papago English (Tannen, 1981).

WENT

This involves the use of WENT in a place where other speakers of English might use LEFT or HAD GONE.

Rachel used this feature twice.

Rachel's Text 11/10/82
...AND A NICE GIRL CAME AND GOT THE DAISY AND
THE GIRL WENT.

GOT/HAS

Our subjects use GOT occasionally in their writing where HAVE or HAS might be considered conventional, but all the subjects use HAVE and HAD conventionally as well. The following are some examples. The last two examples show complexities related to the use of HAD and GOT.

Dana's Text 10/13/82
I GO TO SCHOOL AT TOPOWA. I GOT ONE SISTER.

Elaine's Text 2/25/82
HE HAS A BIG HOUSE. HE GOTS BIG FEET.

Elaine's Text 4/7/83
BUT WE CRASHED. THEN THE POLICE CAME. AND THE
AMBULANCE. AND WE GOT IN THE HOSPITAL.

Ruth's Text 4/7/83
ONCE THERE WAS A TUMBLEWEED JUST SITTING THERE ...
A WOMAN PICKED IT UP AND HAD IT FOR HIS TREE!

Idiosyncrasies

There were a number of features we flagged as dialect, often used by only one child on one occasion. They seem to represent oral language which is not exclusive to Papago English. Our own language intuitions suggest we've heard these features among other English speakers as well. They are listed here in order to have the data available for further research.

Elaine's Text 11/3/81
AND I WAS RIDING THE HORSES. SO
THE MAN WAS RIDING ME. AND I
WENT TO THE RODEO

Elaine is using RIDING ME to mean was GIVING ME A RIDE. We have overheard among other speakers in Tucson: WILL YOU RIDE ME TO THE

STORE?; and SHE's RIDING ME TO THE AIRPORT.

Rachel used AFTER and BEFORE in unusual ways.

Rachel's Text 2/1/82
AFTER, I WENT TO SEE MY BEARS

Rachel's Text 1/7/82
BEFORE THEY PACKED AND THEY WENT OFF.

These uses seem to be related to sequence of events. In the first of Rachel's texts, there are a series of events; AFTER seems to be used to mean FINALLY or AFTER THAT. In the 1/7/82 text she also had listed a series of events and decided at the end of her writing to let the reader know that they had packed earlier, BEFORE all the events she had just mentioned.

Summary

There seem to be dialect features which are represented in writing of our subjects. Only one feature, use of objective pronouns in compound subjects, is used with any degree of consistency. However, we have no evidence that Papago English as spoken by these children in any way interferes with their use of English in writing.

As these children develop experience with a variety of reading materials and continue to write they will expand and refine their awareness of written contexts and of which dialect features are more or less appropriate. There is evidence that they are already beginning to do so (See section on contractions.)

What's most important is the conclusion that these children control a variety of English dialects or registers including Papago English and they can express these in written form and be understood.

Narrative Analysis Instrument

with Lois Bird

This section provides data on some overall aspects of text organization.

The students wrote four different kinds of texts. Narratives account for the largest number of texts, at least 60% for all students. The other types of texts the students wrote, in order of frequency, were letters, reports and a group of miscellaneous texts that were largely descriptions of pictures or other events. It must be noted that it is not always easy to distinguish the various types of texts. In further evaluation of this data we hope to relate the difficulty of categorizing text in its traditional categories such as narrative and expository to a theory of narration. After two years of discussing and trying to understand the differences between narrative and expository writing we are not convinced that they exist separately from each other, especially during the elementary school years.

For the purpose of this report we will evaluate only certain aspects of the narrative texts.

The Narrative Analysis Instrument developed by Goodman and Vaughan evaluates student writing in four categories: plot/events, characterization, setting, and a general statement of the piece's overall quality. Within each category, the piece is rated on a scale that progresses from one to four, with four being the highest possible rating (See Appendix IVE). Thus, a piece that receives an overall score of sixteen has scored the highest rating of four in all four categories.

Using the narrative analysis instrument was a four-step process. Only one researcher judged all the stories in order to maximize reliability. First, before the researcher began the actual analysis, she read every piece of writing in clusters for every subject, in order to gain a basic familiarity with the data as a whole. In this way, she established a baseline from which to judge each piece individually. In this study the stories were read in three batches. Most of Year I was done at one time. Year II was done in two readings, in December and in April.

Secondly, the researcher basically worked with one subject's work at a time, rereading every piece that the subject had written within a particular batch. Thus by the time the researcher was ready to begin the actual analysis on one subject, she had a sense and knowledge of the writing of the subjects as a whole and for each individual. Gaining this sort of familiarity with the writing data is a critical part of the analysis procedure.

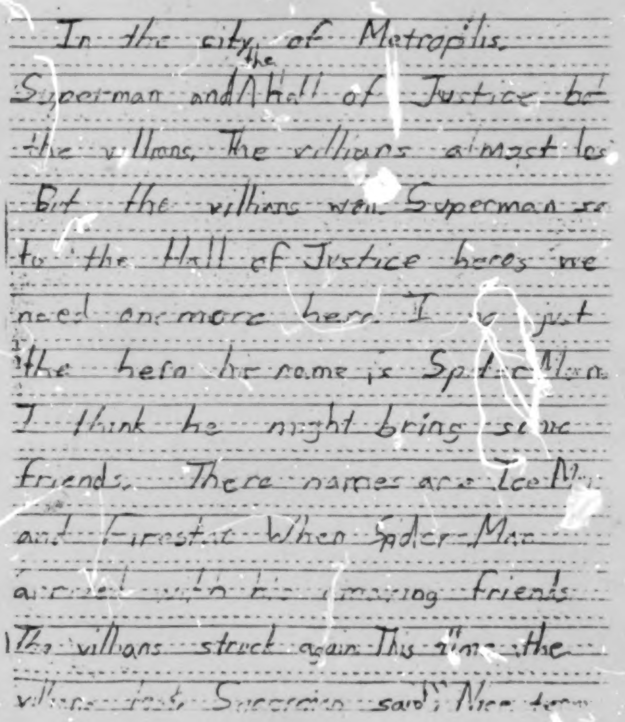
The third step entails concentrating on one piece of writing, reading and rereading the definitions of the narrative analysis categories (See Appendix IVE), and then on the basis of those guidelines deciding how to rate the piece in each of the four categories.

The fourth step is a re-checking, examining once again the analyzed pieces from each subject, and at times changing scores on decisions that have been particularly difficult.

In using the narrative analysis instrument, the researcher obviously relies on subjective decision-making. This knowledgeable subjectivity provides a deep understanding of the child as a writer as the researcher judges each piece in conjunction with other pieces the subject has written, as well as on the basis of what the group as a whole has done, and if she adheres as closely as possible to the analysis guidelines contained within the semantic definitions. By following these steps, the researcher will find that the instrument does reveal distinct patterns in the ways different students express themselves in written form and write stories. These patterns will be addressed mostly in the case studies.

In order to provide a clear understanding of how the narrative analysis instrument works, the researcher has outlined below the analysis procedure she used in scoring one subject's composition, Dana's story about super heroes.

Figure IV-2 Dana's Text 3/1/82



In the city of Metropilis.
Superman and the hall of Justice ba
the villans. The villians almost los
But the villians won Superman sa
to the Hall of Justice heros we
need one more hero I [illegible] just
the hero his name is Spider Man
I think he might bring some
friends. There names are Ice M
and Firestar When Spider-Man
arrived with his amazing friends
The villans struck again This time the
villians lost Superman said "Nice team

In the city of Metropolis , Superman and the Hall of Justice battle
  the villains .
The villains almost lost .
But the villains won .
Superman said to the Hall of Justice heros , " We need one more hero
  .
I know just the hero .
His name is Spider Man .
I think he might bring some friends .
Their names are Ice Man and Firestar . "
When Spider Man arrived with his amazing friends , the villains
  struck again .
This time the villains lost .
Superman said , " Nice team . "

In the first narrative category, plot/events, the researcher rated this piece a 'four'. Although the two battles, the Super Heroes fight against the villains are not described in detail, the main plot - uniting the Super Heroes into one unbeatable force - is nicely developed through the effective use of dialogue and cohesive ties. Each event flows logically into the next, all building up to a simple yet satisfying conclusion.

In the second category, characterization, the researcher rated this story a 'three.' Dana clearly defines his characters and distinguishes between the major character, Superman, and the other minor characters. However, he fails to elaborate and develop his characters. He provides the reader with little or no information as to their physical appearance, thoughts, motives and so forth.

The setting, the hall of justice in the city of Metropolis, brings to mind images of the old Superman comics and the more recent Superman movies which contribute to the piece as a whole. The writer adds no further details, however, so the researcher gave the piece a 'three' in the setting category.

In the fourth and final category, general quality, the researcher rated the story a 'four.' Dana introduces a conflict, suggests a solution, and then carries out the plot to a neat resolution. His writing is sparse but powerful. He captures the mood and tone that is the essence of Superman's calm and level-headed triumph over evil.

Some possible criticisms of this instrument should be mentioned. The most important of these is that the instrument is simplistic. It is clear that it deals primarily with the more concrete aspects of expression - plot, characterization, and setting. But even within these concrete categories, basing the analysis on a simple four-point continuum glosses over finer but equally significant semantic distinctions.

Furthermore, although the fourth category, the general quality statement, is an effort to consider such semantic subtleties as the writer's voice, mood, and tone, it is far too broad and sweeping an evaluation to adequately capture these nuances of expression. For instance, the real power of Dana's narrative lies in his written style and language, neither of which are adequately evaluated in the instrument. Also, his effective use of dialogue as a tool to develop both the plot and the main character, Superman, is not taken into consideration.

A more in-depth instrument of analysis needs to be developed; it would expand the continuum within each category beyond a four-point scale of analysis and develop finer methods for detecting tone, voice, audience, style, and mood, as well as examining more closely the interplay between semantics and syntax and choice of writing strategies. Finally a four-point scale may be helpful for a 'quickie' evaluation but it is too narrow to show growth or development.

In spite of these shortcomings, the Narrative Analysis Instrument does reveal patterns of sense of story. For example, some young writers consistently create well-developed, action-packed plots but give their characters little more than names, e.g., Mike, THE DAY PLUTO ATTACKS SATURN. (See Figure IV-3)

Figure IV-3 Mika's Text 4/27/82

The Day Pluto Attacked Saturn
One day on Saturn people heard bombs hitting Saturn .
They saw spaceships .
On the front of the spaceships it said , " Pluto warships . "
Then the spaceships started firing at the people .
The people on Saturn took out the guns and started firing at the
Pluto warships .
They blew 4 of them up .
Then the Pluto warships blew up one village .
Then the Pluto warships left .
A lot of people on Saturn were injured in the fight .
Then the Pluto warships came back one day .
The Saturn people were ready for them .
The Saturn people saw the Pluto warships .
They started firing .
They blew up one village .
The Saturn people fired their guns .
They blew up 6 Pluto warships .
Then the Pluto warships left forever .
The end

Some writers, on the other hand, develop well-rounded characters who function in almost nonexistent plots like Jean's story about PIXIE STICK.

Figure IV-4 Jean's Text 3/3/82

Once upon a time there was a girl named Pixie Stiack .
And she was a good girl .
She did a lot of work for her mother .
when her mother was at work she cleaned her house . And when her
mother came home , she gave her some money for cleaning their
house .
The End

Hence, to the extent that the instrument reveals basic patterns of narration - plot, characters, setting - it is both reliable and helpful, and may be used, in conjunction with other methods of evaluation, by teachers and researchers alike as a baseline from which to evaluate students' written expression.

confusion over the definitions of terms such as letters, numbers, or words.

Each subject participated in two different types of interviews. One was called the Concepts of Writing Interview and was held at the beginning and end of each year. The other, called the Bi-Monthly Interview, was held approximately every two months where the research and the subjects discussed the writing the latter had done over the previous period of time. The procedures for and numbers of the interviews are described in Chapter III. It is through these interviews as well as discussions held during the observations of the subjects by the researchers that there was a great deal of opportunity to discover the degree to which the subjects could be analytical about language--discuss language as an object of study. It is from these data that the next categories of metalinguistic awareness are available.

In the second category, developing metalinguistics, there are some attempts by the subject to explain the language process, either correctly or incorrectly according to linguistic study. The subject makes use of language to describe language characteristics; to provide functional reasons for language use; to focus on surface structure analysis of language; to partially explain language features. The language used by subjects is related to Smith, Goodman, and Meredith's (1976) private/public conceptualization in which children attempt to make their private conceptions available to a public through the process of abstraction. In making their private conceptualizations public they generate their own meanings.

There are many examples of this developing metalinguistic awareness in our subjects as they try to share with others (the researchers), perhaps for the first time, what they believe and know about language. The in-depth studies provide many examples. A few here will help clarify the Dybdahl categories.

Mark provides many examples of developing metalinguistic awareness. He usually responds to questions such as WHAT IS A GOOD STORY? or WHY IS SPELLING IMPORTANT? with 'I don't know.' Then when he is probed a bit more he begins to formulate some possible ideas. (Interview 3/9/82)

Researcher: What do you...when you write on paper what do you do so that other people can read it?
Mark: Ummmmm...tell 'em what I'm gonna write.
Researcher: O.K. Is there anything you have to do about your handwriting that makes it easier for them to read it?
Mark: Oh, write nice.
Researcher: What does that mean?
Mark: Like, don't write sloppy.

Mark's first response was his own private idea, but as he was probed he began to share more common views about what characteristics are necessary for someone to read another's writing. He is therefore

Metalinguistic Knowledge
with Sherry Vaughan

For our purposes of describing the development of metalinguistic competencies across third and fourth grade writers, we have elected to avoid the conflict that arises in the literature around the issues of reflection, awareness and consciousness and to incorporate part of Philip Dale's definition as most appropriate for use in this study.

> Metalinguistics awareness (is) the ability to think about language and to comment on it. (Dale, 1976)

This inclusive definition provides direction for examining all aspects of what may be considered metalinguistic and allows us to consider the relatedness of each of these issues.

We also subscribe to Papadropoulou and Sinclair's notion of double abstracting involved in developing metalinguistic knowledge.

> On the one hand the child has to become aware of himself as a speaker and hearer by taking some distance from the immediate use of language...and, on the other hand, he has to dissociate the linguistic elements as objects of study from the reality they represent... This capacity develops only very gradually.(Papadropoulou and Sinclair, 1974, p. 250).

Data for charting this developing capability comes from both the manual observations of the children's writing process as well as bi-monthly and concepts of writing interviews. Dybdahl's (1979) categories of 1) use of language, 2) developing metalinguistics, 3) conscious metalinguistics, and 4) scientific metalinguistics may provide some insight into how that data may be analyzed. According to Dybdahl, developing metalinguistic competencies may be classified along a continuum with use of language representing the least developed competency and scientific metalinguistics being the most developed. A subject of course could represent all levels at once, depending on the language context.

The 'use of language' category indicates oral language use about written language within the literacy event without any analysis of language form or function. Language at this level of metalinguistic development may include an evaluation of language appropriateness and perhaps a correction stipulated by a rule violation. It does not, however, indicate that the language user is consciously aware of attempting to communicate these insights to a listener/reader.

All of the subjects used oral language about written language appropriately in context. Metalanguage terms such as READ, WRITE, LETTER, STORY, SENTENCE, PERIOD when used as part of the literacy event communicated appropriate meanings to the listeners. The individual case studies document much of this kind of language. We have no case of any subject using written language register to indicate any moving into the next category: conscious metalinguistic awareness.

Conscious metalinguistics is the next step along the continuum. Here the writer demonstrates an ability to reflect, control and verbalize about linguistic processes. This level is more abstract in that the learner demonstrates the capability of putting language aside and regarding it as an object. This is the level of Vygotsky's verbalized introspection in which a generalization of an expressed concept may occur. Here the writer demonstrates consistent insight of what language is and what it may do, and not simply a verbose explanation. These are often shared meanings about language learned in school but still may not reflect what linguists believe about language.

Anna demonstrates this conscious level of metalinguistics when after rereading a sentence she just wrote she comments to the researcher watching her write on 10/8/82 that she "needed a period there". Later on in the same piece she writes the word CAT when she intends the word MOUSE. On rereading her phrase, HE PUT A CAT... she comments, "Uh, oh--I meant mouse" and makes the appropriate revision.

All of the subjects provide many examples of conscious metalinguistic awareness. Some of the responses like Mark's (Interview 11/5/81) seem to be concepts related to instructional influences although this is not always easy to discriminate.

Researcher: How can you tell it's not a story?
Mark: It don't have periods.
Researcher: Any other reasons?
Mark: Cause it has numbers.

Jean (Interview 3/9/82) provides more sophisticated responses.

Researcher: What does a good writer need to know or do to write well?
Jean: Umm...how to spell words and how to put capitals and the small letters with the periods.
Researcher: ...Now what does a...a bad writer do? Or how can you tell somebody's a bad writer?
Jean: Umm....'cause they read it and it don't sound as good as the other person's.
Researcher: O.k. What do you mean by sound good?
Jean: Like when they read it and some things not spelled good. Or it doesn't make sense.

The scientific metalinguistic category which represents the most developed end of the continuum is characterized by the distinction between the lay person's knowledge and that of a professional linguist or a student of language. This latter category was not useful for this study.

Since our data involves a description of the context of situation for the writing episode as well as a product (both oral and written), there is a large body of information available to identify and describe incidents and patterns of metalinguistic development. It is clear from our data that any individual's metalinguistic knowledge will distribute unevenly across the continuum depending on several factors operating simultaneously on any writing occasion. Knowledge and awareness are revealed when the child writes within a functionally meaningful environment, which may include others either observing or participating in the writing event. Metalinguistic comments are directed to the researcher, peers or the teacher. Interview questions are organized to gain specific knowledge about students' metalinguistic knowledge. The researchers have captured specific instances of metalinguistic activity which are mentioned in the appropriate case studies. There is a great deal of data available to further study the validity of the Dybdahl continuum and to build a theory about metalinguistic development in children as revealed by the writing event.

Behaviors During Composing
With Wendy Kasten

When students write in a classroom a host of activities accompany the actual writing. These activities form a dynamic part of the literacy event. They may have positve or negative impact on the author's product. We called a number of these activities behaviors and collected data on them and analyzed them. We believe all these behaviors have significant influence on the writing process. A great deal more analysis must be done to see how these behaviors interrelate with each other, how they influence text production, and how different assignments or contexts interact with the behaviors.

The following findings on behaviors during the composing process were derived from the "manual observation of writing." (For explanation of the manual observation procedure and definitions of behaviors see Chapter III.) The behaviors that were defined and collected by the researchers while the subjects were writing were later collated and examined. A profile was compiled for each subject of all the behaviors during their writing episodes for the duration of the study. These profiles were examined in regards to individual behaviors as well as in regards to individual subjects. The significance of behaviors on the writing of individual subjects is well documented in the in-depth case studies. A summary of the behaviors for the six subjects for whom we have comparison data is included in Table IV-19.

Table IV-19 Summary of Behaviors: Years I and II

	Year	RV	T	I	RR	D	R	SV	ST	RT
Anna	I	77	0	70	31	0	31	179	31	9
	II	189	3	86	65	7	101	368	33	90
Elaine	I	52	2	34	27	0	43	43	64	54
	II	84	0	58	26	0	58	48	17	31
Gordon	I	111	2	66	55	0	61	64	28	27
	II	185	9	117	37	14	94	40	26	94
Rachel	I	110	1	34	10	0	37	2	43	11
	II	144	4	49	38	2	30	5	131	7
Vincent	I	64	1	50	16	1	31	31	35	38
	II	112	1	50	18	2	28	50	88	31
Dana	I	63	0	75	25	0	20	111	50	26
	II	147	0	73	52	0	8	192	178	31

Codes:
RV= Revision
SV= Subvocalization
RR= Rereading
R= Resource Use
I= Interruptions
RT= Related Talk
T= Teacher Talk
ST= Stop and Think
D= Drawing

The behaviors are discussed here in two categories: 1) active writing behaviors, and 2) supportive writing behaviors. The first category includes behaviors that occur while a writer is actively engaged in composing. This categoory includes rereading, subvocalization, revision, stop and think or pauses, and resource use. These kinds of behaviors seem to be closely related to actual text production in that they typically occur while the writer has the pen or pencil in hand. They involve the production of written language on paper, reading it, changing it or thinking about it.

The second category, supportive writing behaviors, are those behaviors that seem to represent a different level of engagement in the composing process; the pen or pencil is not generally in hand, but the more global, overall process of writing may still be in operation. This includes interruptions, related talk, drawing and teacher incolvement. Although these behaviors can at times signal off-task behavior, probably more frequently the behavior is indirectly related to the overall composing process.

Active Writing Behaviors

During the actual writing of text, the writing process does not appear ever to be uniformly continuous. Instead, writers behave in a variety of ways. They subvocalize, they reread, they revise, and they stop to think.

In the duration of the study, all of the subjects SUBVOCALIZED at least some of the time. Subvocalization (sv) refers to the rehearsing. spelling out or sounding out of portions of the text during the act of production of writing, which may be audible or tacit and can include whispering or mouth movements. Few researchers except for Graves (1982) discuss the possible significance of subvocalization on the evolution of text.

Although all the subjects subvocalize to some degree, some are extensive subvocalize while others subvocalized very little. Most of the writers had writing episodes where no sub-vocalization was observed in both Year I and Year II data. Writing episodes where subvocalization were observed more extensively do not tend to be any particular kind of writing,(letters, narrative, non-narrative) or any particular kind of writing assignments such as unassigned or teacher assigned.

However, preliminary examination of some videotaped sessions would suggest that subvocalization is probably more extensive than manual observation alone shows. Students would sometimes work at their writing in a close, head tilted down position. This made it difficult for anyone positioned next to them to detect tacit mouth movements. Therefore, the quantity of subvocalization data should be viewed as a minimum amount, rather than a truly accurate representation of the extent to which these young writers subvocalize. This phenomenon, which is apparent throughout the data in all the subjects, will be further studied to ascertain its contribution to the writing process. It also seems important to explore the relationship between subvocalization during the reading process and in writing.

RE-READING (rr) can be silent or oral and refers to the reading of any portion of the composition which is initiated by the subject at any time prior to the end of the writing episode. Graves and Murray (1981, p. 114) refer the extensive use of rereading during writing. In both YearI and Year II data, all subjects were observed rereading while they were writing. Our conclusions concur with Graves and Murray that all writers reread. Most subjects showed an increase in the incidents of observed rereadings in Year II. The patterns of rereadings in either year generally showed a variable pattern rather than any gradual increase throughout a year of data. A number of aspects of rereading need to be studied further. At what points in the text do subjects reread? Is rereading related to the process of self-monitoring and self-correcting? How does revision fit into this notion of self-monitoring of the writing process? Is there a relationship between rereading during writing and regressions during the process of reading? The subjects did not appear to reread any more or less during writing episodes that were videotaped. It would seem as though classroom writing can be influenced by many factors such as classroom environment, assignments, and sense of audience etc. which might all contribute to a writers need to reread. Sondra Perl (1980, pp. 365-366) suggests that rereading may occur because of the author's sense of lack of clarity during the process of writing.

The process of REVISION during first draft writing has been cited by many writing researchers as significant in the development of writers (Graves, 1983; Beach, 1976). Revision (rv) refers to any change that the writer makes to the text, whether it is to the orthographic, syntactic, semantic or pragmatic features.

Although all the subjects were observed making revisions throughout the study, there are considerably more revisions in Year II data. Different writers varied in the frequency or consistency with which they revised. The episodes where the greatest number of revisions occurred do not happen to be any particular kind of writing (narative, non-narrative) or writing assignment. (unassigned or assigned) Compositions that were the longest did not necessarily have the greatest number of revisions. Subjects did not appear to revise either more or less in episodes that were video taped when compared to sessions that were not video taped. The frequency of revisions did not particularly differ between the two different classrooms that our subjects were in during the second year of the study.

It would be useful to explore the exact nature of revisions that the subjects made and if the types of revisions that they made changed over the two year period. For the most part the subjects tended to revise mostly on the local text level. That is they made their handwriting neater and corrected their spelling and punctuation; there were few revisions on the global text level. We plan to examine and categorize these differences further. Different subjects seem to revise differently depending on what they have learned to value about writing and their overall model of the writing process. These ideas may be influenced by the nature and extent of writing instruction, their sense of audience and purpose for writing, and the evaluation of writing in a particular classroom. This will be another area for further exploration.

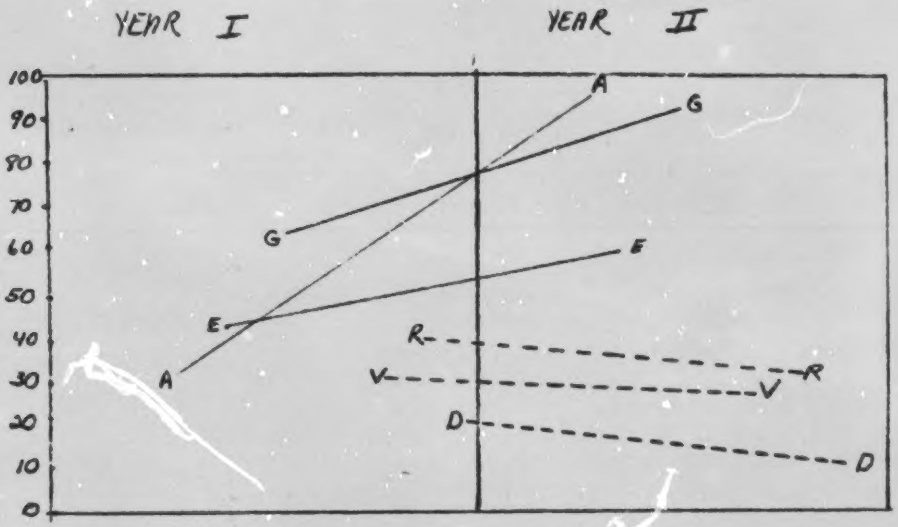
Lastly, all writers STOP AND THINK while writing. Stop and think refers to pauses in the writing process during which the subjects appear to be thinking about their writing. There are many reasons and circumstances that may influence when and why writers pause. Some of our writers seem to be planning as they write. Not all pauses were always related to the students' thinking about their writing.

It is not particularly useful to describe quantities and incidences of these pauses without also examining what happens before or after each pause. We plan to analyze the behaviors as well as the linguistic units in the text prior and subsequent to the pauses, which we believe will reveal the intricacies of behaviors that accompany writing.

A very important behavior that accompanies writing is the use of RESOURCES; its significance is discussed by Calkins (1981). Resource use is the solicitation of all kinds of knowledge related to the composition by the writer. The resources may be physical such as dictionaries, pictures, bulletin boards or writing folders. Or resources may be human like asking someone how to spell a word or where to end a sentence. Our subjects did all of these. Resource use is significant since it allows the writer to become aware of how the literacy community can be supportive to the production of text. Resource use is tied to the organization of the classroom, how mobile the children are allowed to be and how accessible materials are. This may be why Alice, Elaine and Gordon all had more resource use in Year II than in Year I; they were in the same classroom together.

All of the subjects in the study used resources during both Year I and Year II. During Year I, the use of resources was variable; sometimes the subjects used many resources and other times very few. In Year II, the subjects who were retained in the 'pre-fourth' grade used resources more than twice as much as those same subjects had in Year I. The subjects who went on to the regular fourth grade stayed about the same except for Dana who showed some decline in his use of resources. Figure IV-20 shows the frequency of resource use for each subject and the change from Year I to Year II.

Table IV-20 Resource Use Change From Year I to Year II



The writing episodes where more resource use was observed did not relate to a particular type of writing assignment. In other words, non-narrative writing did not have more or less resource use than narrative writing or pen pal letters. Some subjects tended to be more extensive users of resources than others during both years, such as

Elaine and Gordon (See Table IV-20).

The relation of resource use to the overall process of composing is a topic for further study.

Supportive Writing Behaviors

Some behaviors that are observed during the composing process tend to occur when the writer is not actively producing text. The pencil may not be in the writer's hand. Yet these behaviors might be important aspects of the overall process of composing.

For example, writers may talk during their writing episode. Often this talk is directly related to their writing. For example, "I don't know what to write," "What should I write next?" and "There, I'm done." are all utterances that occur because writing is taking place. This language was coded as RELATED TALK. Related talk (rt) was defined as comments or conversation other than resource use that is somehow related to the fact that the subject is engaged in writing.

If subjects spoke during writing that was not related to their writing, it was coded as an INTERRUPTION. Interruptions (i) were defined as researcher observed overt verbal or non-verbal interactions or actions, whether solicited by the subject or by some other stimulus. For example, "It's time to clean up," and "Does Mr. Weatherill tell about the weather?" are utterances that are interruptions. They are not directly related to the fact that a subject is writing and could happen at any time. Interruptions might not include any oral language; when, for example, subjects are distracted by someone entering the room, the school bell ringing, or a kick from a nearby classmate under the table.

Every subject was observed engaged in related talk in both Year I and Year II data. No subject was observed to be engaged in related talk in every single writing episode. Some subjects had more observed incidences of related talk and tended to talk more consistently. There are more incidences of related talk in Year II data than in Year I data. However, there are no particular differences in Year II data between the subjects in the 'pre-fourth' grade and those in the regular fourth grade. Most subjects talked about the same amount during sessions that were video taped when compared with their sessions that were only manually observed. This category is a rich source of data to investigate any possible role that related talk may play in the overall composing process. It provides a good deal of information about the supportive role of peers as well as the adult members of the literacy community in the classroom.

Some interruptions may represent a form of off-task behavior: for example, when subjects talk about what's for lunch, discuss a movie they saw on television, grab a neighbor's pencil, or borrow a better eraser. Their actions are not necessarily an integral part of their writing. However there are times when the off-hand remark about a movie or the action of the grabbed pencil do become part of a subject's written text. More in-depth analysis of this category and the context in which interruptions occur is necessary. Sometimes interruptions represent a high degree of writer involvement, when the nature of the interruptions is aimed at solving problems that writers encounter. A writer might stop to listen to a conversation of nearby students, and in the course of listening get a new idea for the writing task at hand. Or a subject may stop to read the composition of a nearby classmate, or listen to them reading their story aloud. These interactions may contribute to the decisions that writers make as well as their concern for audience.

At other times, interruptions might be an avoidance of the writing task. For example, on one occasion in Year I, Dana spends 25 minutes flipping through reference books looking at the pictures with no real intention of using those books for resources. In this case both interruption and resource use combine to keep Dana from his assigned task of writing a story about the Arizona state seal. Dana is confused about the assignment and delays beginning it as long as possible. Dana knows that since he looks busy and involved, his lack of writing will probably go unnoticed.

Interruptions may or may not actually interrupt the overall process of composing, depending on the nature of the interruption. Also, since interruptions often occur in conjunction with other behaviors, they may be related in some ways to other behaviors. For example, an unsolicited interruption like a loudspeaker announcement may cause a writer to have to reread some portion of his or her text in order to resume writing. That rereading process might in turn, lead to a revision in that text. These relationships need further study. One thing that is apparent in the data is that there are not particularly more or less interruptions during writing episodes that were videotaped.

Two other, special kinds of behaviors that may occur during writing are TEACHER INVOLVEMENT (t) and DRAWING (d). Teacher involvement is coded any time the teacher is involved with the subject directly related to the child's composition.

Teacher involvment seldom occurs in our data except when it was initiated by the student who was seeking assistance or reinforcement in regards to the task at hand, which would be coded resource use and suggests the strong interrelationships among the behaviors.

In a classroom where ongoing conferencing would be an integral aspect of the classroom procedure including during first draft writing, this category would become more useful than it happens to have been in the particular research settings in this study. Any conferencing that was part of the classrooms in this study did not generally occur during the first draft stage.

Drawing would occasionally accompany the writing process also. However, it was generally not the writer's option to include drawing or

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not. The assignment or the instructions prior to writing time generally outlined the procedures and whether or not drawing should be included. Often drawing was instructed to be completed before actual writing would begin. Drawing was used in a number of different ways. In Ms. Caldwell's class (Year II), students were often assigned to draw a picture, and then write a story about the picture, or write to describe the picture that they drew. In Ms. Pagett's classroom (Year II) scribble lined pattens were put on prepared ditto masters and each student was asked to interpret the scribble by turning it into a picture or an object, and using the drawing to create a story.

Drawing can make a significant contribution to the writing process and is often underutilized and undervalued. The time and act of drawing can be the pre-writing part of the composing process where writers have the time to think, invent story plots, settings, and characters, and think about how to construct what they want to say. Drawing can also help students learn to describe things to their audience as they begin to learn that both drawing and words can create pictures for readers.

The discussion of behaviors simply adds to the complexity of the writing process. It helps us to see how vital the social community of the classroom is to the author's making of meaning.

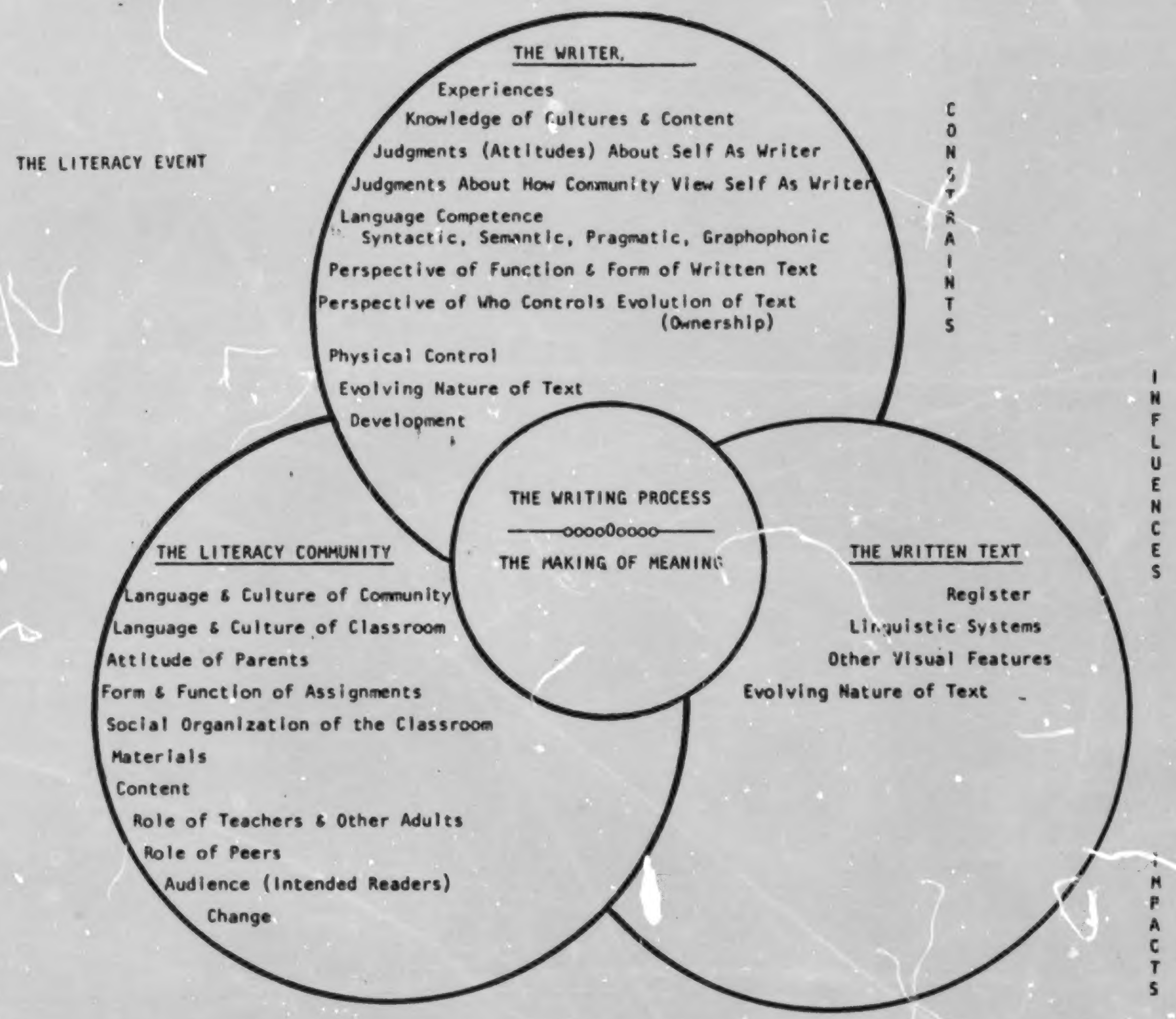

THE LITERACY EVENT
THE WRITER
Experiences
Knowledge of Cultures & Content
Judgments (Attitudes) About Self As Writer
Judgments About How Community View Self As Writer
Language Competence
Syntactic, Semantic, Pragmatic, Graphophonic
Perspective of Function & Form of Written Text
Perspective of Who Controls Evolution of Text (Ownership)
Physical Control
Evolving Nature of Text
Development
CONSTRAINTS
THE WRITING PROCESS
ooooOoooo
THE MAKING OF MEANING
THE LITERACY COMMUNITY
Language & Culture of Community
Language & Culture of Classroom
Attitude of Parents
Form & Function of Assignments
Social Organization of the Classroom
Materials
Content
Role of Teachers & Other Adults
Role of Peers
Audience (Intended Readers)
Change
THE WRITTEN TEXT
Register
Linguistic Systems
Other Visual Features
Evolving Nature of Text
INFLUENCES
IMPACTS

Figure V-1 The Literacy Event

The subjects in this study are ten Papago Indian children whose writing we observed, analyzed, and discussed with them and their teachers, for a period of two years. We have developed a profile of the children as writers and authors and we have collected a large amount of data which can be used to describe the development of each individual. In this chapter we will show how third and fourth graders are makers of meaning as writers in classrooms. Following the overall profile are in-depth case studies on each of the six children who were subjects in the study throughout the two year period.

Every piece of writing produced by the children in this study is a complex literacy event; Figure V-1 is a graphic overview of this event. The complexities of the processes involved in composition can be characterized as a wide variety of constraints, influences or impacts on the making of meaning through written language. (We use the terms influences, constraints and impacts as synonymous.) We have organized these constraints into three broad categories in order to highlight their interaction, especially as they operate in a classroom setting. They include influences from the LITERACY COMMUNITY, the impact of the WRITER and the constraints of the WRITTEN TEXT.

The Literacy Community

The writing of our third and fourth grade Papago subjects takes place in the social context of the classroom. Within this context each member of the classroom community is also a member of family and cultural groups. The writing of these children reflect their background and experiences. Every time children wrote for us we were aware that their language and culture were represented in their writing. These children call on their language repetoire as members of numerous language and social groups which have come into contact. Their writing reflects aspects of Papago English and aspects of more general oral English, as well as an awareness of the kind of language that is appropriate to various kinds of writing. Culture is also reflected in their writing. It is possible to tell from their writing that these children are not only part of the Papago culture group but also members of the culture of eight- to ten-year old American children influenced by television, movies and the school curriculum. The examples which are found in the case studies will exemplify these points.

As the children represent the worlds of their homes and communities in their writing, the extent of teachers' writing assignments and choice within those assignments also impact on the writing of these children. Our conclusions support those of Donald Graves and his New Hampshire team of researchers (Graves, 1983) that assignments may narrow what and how children write. However, there is still good writing in response to assignments as well. In most cases, narrative writing is better than expository, although the students do not always keep these two genres in neat categories. The examination of genre in the children's writing leaves us with the question of whether genre can be divided into the neat categories so prevalent in the fields of reading and writing.

Classroom organization strongly influences the developing text of the writer. Children's writing reflects the amount of time they are given to write. When children only have a specified short writing period daily which must result in a finished product at the end of the period, story endings are often quickly conceived. Time to finish later in the day or opportunities to continue writing even as other activities begin provide students with time to think about the ending of a piece and to shape it appropriately to the wishes of the author.

Classroom organization includes the opportunities that there are to interact with peers and teachers during writing episodes. Our case studies provide ample examples of the significance of talk within the writing community during composition. Even when interactions seem to be boisterous there is much to gain from the opportunities to question teachers and peers, to support each other and answer questions, to think aloud and get a discussion going about a piece of writing. Whether children face each other or sit in straight rows influences these important cooperative episodes in the writing community.

The opportunity to move around the classroom, to have the necessary support materials available and accessible in the room, and to have the school library easily accessible, all allow writers "to live off the land," a metaphor Graves uses to describe the importance of the availability of classroom resources. A rich environment in terms of resources provides children with opportunities to think about, read about, talk about, and extend their composing. Opportunities to use reference books and dictionaries and to view scenes outside the window, as well as to interact with human resources, dynamically influence the writing of children and deserve continued study. However, the greatest importance of the discovery of the impact of classroom organization and accessibility of resources on children's writing lies in how teachers and administrators view this impact as they make decisions about the kind of environments to establish in schools and classrooms.

The literacy community also provides the audience of readers for the writer's evolution of the text as well as for the completed text itself. The impact of the audience, the dynamic expectations of the audience, and the ways in which the various audiences interact with the writer all have their influences and either help support the construction of text or can in a variety of ways impede and stultify the writer's final product.

The Writer

Every time a child wrote for us, we became consciously aware of the strengths of a writer developing as an author. Each child in our study is a competent oral English user able to communicate appropriately with school personnel and researchers. The oral interviews and the writing samples reveal the children's control over all the major linguistic features of English. They produce the syntactic structures of English in many appropriate variations. They write dialogue, questions, imperatives and declarative sentences. They show through their writing an intuitive knowledge of linguistic units such as words, clauses, discourse units, stories, letters, dialogue, narratives and expositions. They provide evidence of the dynamic ability of humans to invent forms of written language as they try to use language for a variety of purposes and functions.

Every writing episode in which our subjects were involved provides evidence that the writers know they can produce a written message which others may read. They write about personal concerns, real events and imagined experiences. They write about the various cultures that they are part of and that are part of them. They bring E.T. and Ee'toi (a Papago culture hero) together in one story. They write about Indian legends that they have heard at home, about becoming medicine men and going to rodeos, sometimes within the same stories that they write about PacMan at the arcade and the Sun Devils football game in Tempe, Arizona.

They use first person to reveal themselves as speakers in a story or letter, and in their third person narratives use pronouns to refer to appropriate characters and objects. They are aware of audience expectations. Their letters, narratives and expositions show that they use different language for different genres and for their different audiences. They exploit different forms as they write letters or stories or lists.

Our writers are very sensitive to the literacy community and to the daily social interactions of a classroom, which are as much a part of their compositions as the knowledge and ability the writers use in their writing. They discuss what they are writing with others and suggest ideas about writing to others. They talk about their finished compositions using meaningful oral language. They provide reasons for why they like their own writing, why they believe they are good or bad writers, and which of their writings their teachers will like. Their reasons reflect expectations of school and community toward a final product as well as personal involvement in their writings as authors. They want others to read what they write and they are aware that writing can be edited by themselves and others. They sometimes ask others about topics and look for topics on lists and in books. They ask others to verify their knowledge about spellings and appropriate language depending on the degree to which they want to control conventions for a particular piece of writing. They know that there is information in dictionaries and books and on charts, chalkboards, and wall charts that might help them with vocabulary and conventional spellings.

These strengths which we've described were evident in the very first writings the subjects produced. They didn't control this knowledge about writing according to adult conventional forms but they showed in various ways that they knew what were significant aspects of the writing process. Over two years we saw development in all the aspects of the writing process as well. Development does not mean simply doing something better according to an adult standard. Rather development reflects the growing experience of the writers as they use written language in specific contexts to express their meanings.

In discussing development it is important to include a writer's willingness to wade into uncharted waters and being willing to take risks. Development in writing means attempting to use more complex language and to express more complex ideas, resulting in written texts which sometimes look as if control over aspects controlled earlier is no longer present. However, these controls usually return later in the student's writing with greater sophistication. From the beginning of the third grade to the end of the fourth grade, it is easy to show development in our subjects statistically in such areas as conventional spelling and improved punctuation, more clauses embedded in T-units, longer, more cohesive and coherent written texts, and the exploration of more complex topics. But this development is not obvious from one writing episode to the next. Wilkinson says "Development obviously takes place, but does not take place obviously." (Wilkinson, et. al., 1980, p.2) Often as the writer attends to a new concern in the composition, energy and attention are directed to that "new" problem, and writing conventions the writer usually controls seem to fall apart. The result is a written text that may look much less sophisticated than an earlier piece. We call this development saltatory in keeping with Heinz Werner's view of development being discontinuous, with highs and lows, leaps and descents in growth in all areas, instead of following the mythical view that development proceeds by gradual ascending transitions in a neat and orderly incremental fashion (Werner, 1958).

This developmental view of the writers in our study is based on a view of strengths. Another view of development might have focused on "problems." Spellings were not 100% conventionalized, grammatical structures were not always complete, antecedents were not always clear, narrative and expository forms often were part of the same composition. We will address these issues as we look more closely at the data in the in-depth analysis of each writer. The point here is to appreciate that the problems reveal abilities of the subjects. They must have knowledge about literature in order to mix genre, they must understand aspects of the English alphabetic system in order to invent spellings, they must control cohesion in order to produce ambiguous devices. As we accept the saltatory nature of development in writing, we will be able to help students become better writers and help teachers build developmentally supportive writing curriculum in schools.

The Text

The written text is the result of the numerous interactions of the literacy community and the writer during a literacy event. Much of the complexities that we have presented are revealed through the careful observation of the evolution of the text and the analysis of this product. The many interactions result in the register of the text--the language of the text chosen by the author during the evolution of a written text. The text reflects the writer's personal expectations as well as the expectations of the literacy community. The text reflects the interface between the writer, the text and the social context. It is important to keep in mind that our research was focused on the authors' first drafts whenever possible. For most of our subjects this was often their only produced text. However it is necessary to entertain the idea that there are numerous texts (the oral text, as kids talk about what they will write and the mental text, what the kids have in mind that they will write, as well as the written text itself) in the evolution of any particular written text, each reflecting the complexity of the transactions among the writer, the literacy community and the evolving nature of the text.

Change--Development--Evolving Nature of Text

The dynamic nature of change must be considered as we think about a literacy event, because each of the intersecting categories we have described is in flux even during the act of one literacy event, let alone across the many literacy events which occur during the school term or year. The literacy community is always recreated as teachers, peers, and non-human resources are reorganized, changed, moved or developed over time. The writer is also developing, growing, changing. This development, responding to the complex of transactions with the text and the literacy community, may not always produce better writers in terms of the product or of writers who believe they are in greater control of their writing process. As much of a positive influence as the complexities can have on the writer, to that same degree the results can be negative.

In this profile we have presented our notions about the constraints, influences and impacts of the complexity of the writing process. We hope that this presentation generates discussion among the researchers in the field of writing as well as among curriculum developers including teachers concerned with the writing of children. We encourage reactions and critiques.

CHAPTER VI: ANNA

By Sherry Vaughan

Personal Data

Anna is a pretty, dark-haired, brown-eyed Papago child who lives with her parents, two brothers (one older and one younger) and one older sister in a village southeast of the administrative center of the reservation. Her father works as a laborer and her mother works as an instructional aide at the elementary school. Both parents speak English and Papago in the home. Her parents say that Anna understands most of the Papago her parents use but doesn't really speak much Papago herself, except for a few words. When the children were infants the mother made a conscious decision not to teach them Papago because she had had bad experiences in school as a child who didn't speak English well. She now believes her decision was unfortunate.

According to her parents, Anna has never been an avid reader. Her school experiences since kindergarten involved a language experience approach, but her mother believes she was not a reader until third grade. The mother blames Anna's reading difficulties on a lack of phonics instruction, and at the end of Anna's third year at school her mother enrolled her in a Weekly Reader summer program. Prior to that, the parents had taken Anna on frequent public library trips, but Anna loaned her books to friends who lost them, and as a result Anna had to pay hefty library fines. That experience effectively eliminated the library trips. The family has a T.V., but Anna's parents say she doesn't watch much.

Her parents have materials in the home for both reading and writing. They bought her the Sweet Pickles series which consists of about ten second grade level stories and blank books for writing.

Anna enjoys writing more than reading. For the past several years she has had a sponsor from New York who has provided a lot of experiences which Anna has written about. She has taken Anna on numerous trips and writes to her regularly, giving Anna opportunities to respond both to the letters and to the trips they have taken together. She also writes letters to a friend in Wisconsin and notes to kids in the neighborhood. Since her home is approximately sixty-five miles from Tucson, Anna takes paper along and writes in the car on their weekly trips. Her mother says Anna doesn't want help with her writing, doesn't like to rewrite and doesn't always finish things.

During the course of the study Anna brought home several books and stories that she had written at school, and her father especially enjoyed reading them. They have saved her books, and Anna's younger brother reads them. Sometimes the two of them work together sitting at the kitchen table, Anna writing, her brother reading what Anna has written.

Anna's parents are pleased with her progress in writing. They both feel that she writes interesting stories, and they are pleased to see her strong improvement in spelling. Anna was placed in a pre-fourth grade at the elementary school at the end of third grade and not sent to the middle school with the regular fourth graders. Anna's mother supported that decision because she felt Anna was not ready to move on and could profit from another year at the elementary school.

Over the two-year course of the study, Anna moved from being a shy, restrained, reticent child to being a confident organizer, mediator and caretaker in both her classrooms. She often took care of housekeeping duties like hanging the daily attendance report outside the door of her classroom, settled disputes between her classmates, and looked after those who had special needs on any given day. During the second year of the study, one classmate went out to a special education teacher for reading every day at 1:00, and it was often Anna who kept him on schedule.

Social Context

The major influences on Anna's writing development which interact simultaneously when she composes in the classroom setting include: the teacher within both a personal and an instructional context; the classroom aides; the researchers; and her classmates. Some examples of each type of interaction will introduce Anna's composing activity; a chronological discussion of her composing process as it developed across the two years will follow.

Teacher Interaction

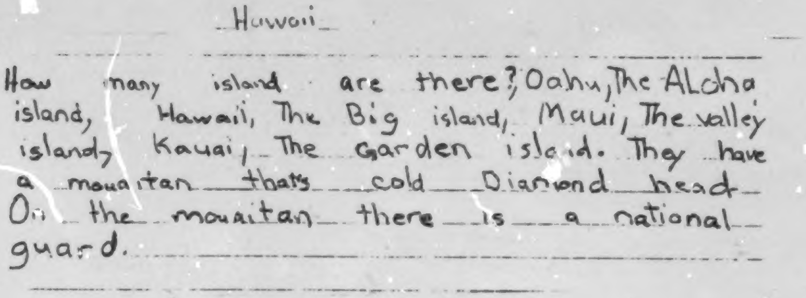
Anna worked well with both teachers during the course of the study. The following is a representative example of how she interacted with Ms. Howard during Year I. On 11/17/81 Ms. Howard goes over to Anna working in the writing center and asks her why she is rewriting a letter that hasn't been edited yet. Ms. Howard offers to help edit. They read the piece together and Ms. Howard helps correct spelling by reminding her of the long i rule and pointing out that even though Anna wanted SAD she had actually written SAID. With THANKSGIVING Ms. Howard asks her to say the word aloud and listen to the sound of the last letter. Anna says "k" and adds it. Ms. Howard points out needed capitals and the long vowel rule, refers her to the dictionary for a word, refers her to an earlier instance of the word in her own text, and then asks her about how a letter is supposed to end. Anna adds the appropriate ending.

During Year II Anna is writing a report on Hawaii. The activity has arisen from the students' draw-write-share activity where they draw a picture, write about it and then present their drawing and read their writing to their classmates. Students in the audience are encouraged to ask questions of the presenter. That questioning activity has led to more of a general questioning attitude by the students, not only of other students' work but of resource material in general, including social studies information.

Ms. Caldwell had introduced the idea of another kind of writing--writing to provide information rather than to tell stories. Together Ms. Caldwell and the students got out all kinds of informative materials on subjects the students were interested in. Then they wrote a few sentences about the topic for their classmates. Anna's topic was Hawaii.

This new information-getting and new kind of writing turns out to be difficult for Anna. She runs into trouble immediately with strange vocabulary words and an incredible amount of information which she doesn't know how to condense. Ms. Caldwell pulls up a chair and begins to help Anna decide what to write. She asks her first to tell about some of the interesting things she read. Anna says she was surprised that Hawaii was really a group of islands rather than just one. Ms. Caldwell says that's interesting and certainly something worth writing about. Anna begins to write.

Figure VI-1 Anna's Text - 10/12/82



Hawaii

How many island are there? Oahu, The Aloha
island, Hawaii, The Big island, Maui, The valley
island, Kauai, The Garden island. They have
a mouaitan thats cold Diamond head
On the mouaitan there is a national
guard.

Hawaii
How many islands are there ?
Oahu , the Aloha Island , Hawaii , the Big Island , Maui , the valley
Island , Kauai , the Garden Island .
They have a mountain that's called Diamond Head .
On the mountain there is a national guard .

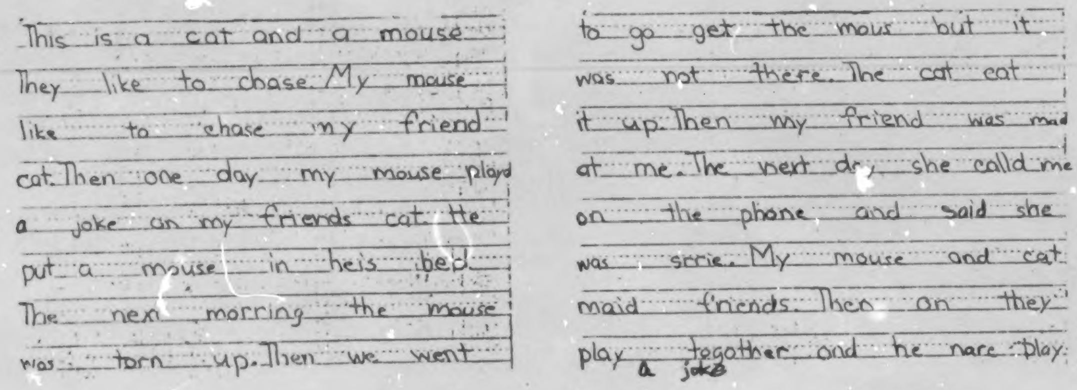
She concludes her piece with an extra sentence about a National Guard armory on top of Diamond Head that she has seen in a picture.

During this whole writing episode Ms. Caldwell comes over and checks on Anna's progress. She knows this is a new, more difficult type of writing so she keeps in touch with the ongoing process as it develops. She encourages with smiles and physical touches, rewards with praise, insures that Anna is proceeding correctly and finally congratulates her successful final product. Anna is pleased and energetic about her writing.

Researcher Interaction

Since the researchers play a participant/observer role in the writing activity in the classroom, they too interact with other social factors to create the writing context. On 10/08/82 Anna wrote this story about a cat and mouse.

Figure VI-2 Anna's Text - 10/8/82


This is a cat and a mouse
They like to chase My mouse
like to chase my friend
cat. Then one day my mouse playd
a joke on my friends cat. He
put a mouse in heis bed
The nex morring the mouse
was torn up. Then we went
to go get the mous but it
was not there. The cat eat
it up. Then my friend was mad
at me. The next day she calld me
on the phone and said she
was sorie. My mouse and cat
maid friends. Then on they
play together and he nare play
a joke

This is a cat and a mouse .
They like to chase .
My mouse likes to chase my friend's cat .
Then one day my mouse played a joke on my friend's cat .
He put a mouse in his bed .
The next morning the mouse was torn up .
Then we went to go get the mouse
but it was not there .
The cat ate it up .
Then my friend was mad at me .
The next day she called me on the phone and said she was sorry .

My mouse and cat made friends .
Then on they played together
and he never played a joke .

After she finishes writing the piece she reads it aloud to the researcher. The researcher asks her if the last sentence made sense. Anna reads it again and said yes. The reearcher then said, "If I put a FROM at the beginning of the sentence, would it still make sense?" Anna says yes and starts to add it. The researcher asks if Anna would normally say it that way (with "from"). She says no, so the reearcher goes on to talk with Anna about different dialects. They compare notes on how their separate dialects allow different responses and reject others. The end result is that Anna decides to leave her sentence the way she originally had written it.

As the year progressed researchers began to interact more with the subjects during the composing period but usually at the very end, when the subject had completed his or her own interaction with the composition. On 11/01/82 after Anna finished her piece she read it to the researcher and then made several revisions as a result of her reading. After that process the researcher suggested that there were some invented spellings and asked her if she could find them. She then changed FURST to FIRST and JIST to JUST. The researcher pointed out that something was wrong with DREMING and asked her if she could find it. Anna immediately added the A to its appropriate place.

Peer Interaction

Peers as well as teachers and aides are important in Anna's development as a writer. She often uses them as resources for spelling, ideas and clarification of procedures. On 11/17/81 during Year I, Anna talks with Mike, one of her classmates at her table, about the letters they are composing to Mr. and Mrs. Turkey who have lost their son to a Thanksgiving feast. They discuss appropriate letter format, spelling (especially THANKSGIVING) and whether their letters make sense. The interaction is reciprocal, with both sharing their opinions of their classmate's work and requesting information from the other. The atmosphere of the classroom with its organization for interaction among the children facilitates this kind of activity.

The fact that Anna asks others' opinions does not necessarily mean she revises her text accordingly, however. On 2/9/82 Anna asks a group of students how to spell KEPT. After she listens to each one's view she then decides her original way was best.

Often throughout the year when characters had to be named, Anna would choose to give them the same names as her classmates. Sometimes this naming is in collaboration with the others, and sometimes she does it to tease them. This naming process becomes a game that provides a social context for writing. On 3/2/82, for example, when a character needs a name, the aide Ms. Manuel even gets included. Anna plays a little game with Ms. Manuel where Anna pretends she is writing her story about Ms. Manuel and hides her text from Ms. Manuel (who is trying to observe the writing process).

Occasionally classmates actually prove to be a hindrance to Anna's composing, especially when she is being videotaped. On 3/30/82 Mike distracts her by sticking his fingers up behind her head and teasing her. His own agenda is to get himself on tape, and he doesn't mind that he is interfering with Anna's writing. On another occasion, in the whole twenty minute writing center time Anna only completes one sentence because she and Mike are comparing their heights, grabbing each other's papers and talking about things other than their writing.

During the early part of the second year, 9/21/82, Ms. Caldwell asked the children on a daily basis to draw whatever they chose and then write about it; a length of four sentences was suggested. During this early phase the class is arranged at tables in groups of four. These students request materials from each other, but at this early part of the year not much interaction occurs. Later in the hour a great deal of activity occurs when Anna needs to know how to spell DRAGON. She looks for it in the dictionary but has a difficult time finding it since she is distracted by the surrounding words and pictures in the dictionary. Two of the boys get involved with Anne in the search, and while Anna goes to get a drink of water, one of them finds the word for her (shades of Tom Sawyer?).

Later on in that same writing period, Anna tries to spell VALLEY. She talks to one of the boys at the table, and he tries to remember the spelling from "The Big Valley" on T.V.

Occasionally Anna serves as an arbiter of other classmates' problems. On 10/19/82 two boys were fighting over a picture that had been used as a stimulus for writing. One supposedly grabbed the picture from the other one, and a great ruckus arose. They were bothering Anna, so she stepped in and found out what was going on and immediately solved the problem. Both boys seemed perfectly happy with this arrangement.

At times what actually makes it to the paper is largely a group effort. On 10/26/82 Anna collaborates with several different people while writing her piece. Initially the group at her table helped Anna make a decision about a topic. Then others in the class helped at different times to spell conventionally and to edit for different kinds of semantic information, e.g. words left out and whether something makes sense.

Sometimes Anna's major priority during writing time is social rather than academic. On 11/16/82 she indicates at the beginning of the session that she can't think of what to write about that day. She visits with the researcher, looks at a copy of the Guinness Book of World Records, looks at pictures with a classmate, runs an errand for the teacher and folds paper she'll need for another center. In all, she uses up nearly twenty minutes. Then she begins a piece about two friends which is very social in nature. Throughout the composing of the whole piece she stops to listen to others read their work, to watch classmates or to ask the researcher personal questions.

Composing in the Social Context; Year I

The framework for presenting this data will represent an integrated view of language and composing. It presents the writer's composing activity within a combination of contexts--situational, linguistic, psychological and socio-cultural--and around three major issues--function, form and meaning.

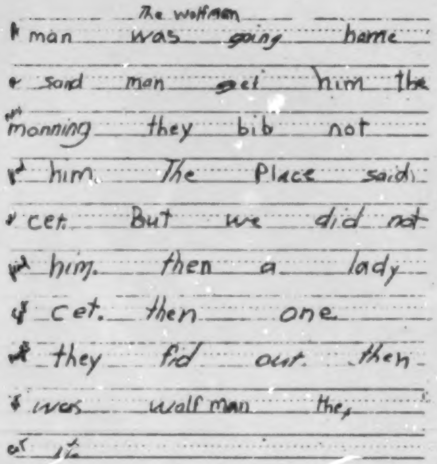
Anna's composing process will be described as it occurred in various "chunks" over the two years. These chunks are sometimes related pieces of writing and sometimes arbitrary delineations. The purpose is to focus on a segment of writing rather than each piece of writing separately. Within each chunk of data, each of the relevant contextual constraints will be discussed as they become appropriate: social context, e.g. teacher, peer, researcher interaction; instructional context, e.g. assignment, background of knowledge, format and teacher direction; and Anna's knowledge about composing, e.g. concept of writing, topic choice and development, and composing behaviors. A preliminary analysis of the product will also be presented within each chunk of data. This product analysis will focus on pragmatic, semantic, syntactic and orthographic features of the text. With a few exceptions (which will be noted in the discussion), each text presented is a first draft version of the piece; no focussed editing had been attempted at this stage of composing. As has been described, editing goes on even during first draft writing as Anna interacts with others, seeks out information and relies on both human and literary resources.

First Chunk: Year I

This first chunk of writing includes the pieces Anna wrote from the beginning of the study in late October until after the Christmas holiday. These pieces show Anna's original attitude about and performance in writing and also demonstrate how her attitude and performance changed during the first few months of the study.

Our initial observations with Anna showed her to be interested in writing (sometimes even intrigued by it), yet at times not at all confident about her abilities to get the job done. On 10/20/81, our first day of observation, she got materials together quickly and settled down to work with an intensity that indicated a high level of involvement in the task at hand. As was the usual case, the teacher had provided information on a general topic, Halloween, from which the students were to generate their own specific individual focus. Anna wrote the following story about a wolfman:

Figure VI-3 Anna's Text 10/20/81



The wolfman
man was going hame
sand man get him the
monning they bib not
him. The Place said
cet. But we did not
him. then a lady
cet. then one
they fid out. then
was walf man they
it.

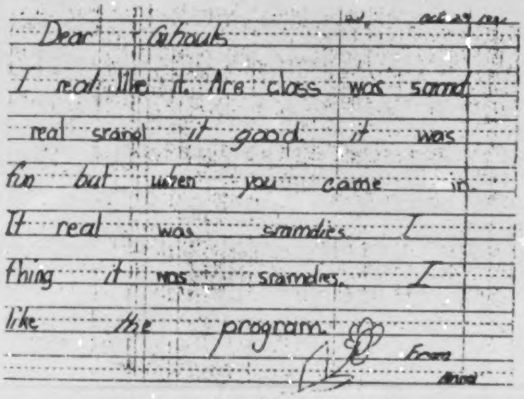
The wolfman
A man was going home .
A strange man got him .
The next morning they did not find him .
The police said , " We can't .
But we did not find him . "
Then a lady got killed .
Then one night they found out that it was wolfman .
They killed it .

During the composing of this piece Anna demonstrates a use of outside sources for spelling, e.g. a word poster of Halloween words, a list of high frequency words and an alphabet chart around the room. As she writes her title THE WOLFMAN she notes the spelling of wolfman from the Halloween word list on the board. She continues uninterrupted with her text until she reaches the word MORNING. She goes over to the wall chart and searches through the M words until she finds the one she wants.

Anna demonstrates early in the study and without any overt instruction that she knows how to revise while writing. In THE WOLFMAN when she gets to WE DID NOT FIND HIM, on lines 5 and 6, she stops, rereads the whole piece up to that point and puts periods after DID NOT FIND HIM on line 4, after WE CAN'T on line 5, and after DID NOT FIND HIM on line 6. In generating the remainder of the text she checks the chart for spellings of LADY, line 6, GOT, line 7 (but she makes the wrong choice here and writes GET), and KILLED, line 7 (which she can't find). She stops at this point, rereads and then adds a period. She writes the first letter of NIGHT, line 8 and then checks the chart again for spelling. She completes the text and then announces, "I'm done."

During these early writing episodes, Anna's writing is often a struggle. On 10/29/81 it was the day before Halloween and the room was buzzing with excitement. When the researchers arrived a little before 10:00 a.m. the group had just returned from watching a scary movie and a special program by the fourth graders who were all decked out in scary Halloween costumes. As soon as Anna's class arrived back in their classroom, their assignment was to write a thank-you letter to the fourth graders for presenting the program. Everyone had a hard time getting started, and Anna's writing episode reveals some of that excitement and anxiety. Anna's final product looked like this:

Figure VI-4 Anna's Text 10/29/81



oct 29 [illegible]
Dear Ghouls
I real like it. Are class was sared
real sared it good. it was
fun but when you came in.
It real was sarndies. I
thing it was sarndies. I
like the program.
From
Anna

Dear Ghouls ,
I really liked it .
Our class was scared , real scared .
It's good .
It was fun
but when you came in , it really was scary .
I think it was scary .
I liked the program .
From Anna

The product does not at all reveal the anxiety that accompanied it, however. Anna first writes the date and heading in their appropriate places and then begins the text. She erases several times, is still dissatified with the result and finally begins again. But she doesn't throw the first piece away. She keeps it available. On the second page she writes the date and heading again and begins the new text in the same way she began the old one, "DEAR GHOUL I REAL LIKE IT." Then she wants to say something she has a great deal of trouble with. First she writes WERE; she erases that word and writes WE ARE. She erases that phrase and writes WERE again; erases WERE and writes WAS. She writes three more words of text, SCRANEIY ORA CLASS, and then decides the whole thing is unacceptable and goes back to working on the first piece again. But then she decides all of it is unacceptable and junks everything. At that point Anna has an interesting interaction with the researcher:

R: Can you tell me why you are working on two separate pieces?
A: I keep messing them up.
R: Why are they messed up?
A: I don't know. (At this point she listens to further directions from the teacher.)
A: I can't write.
R: Why can't you write today?
A: I don't know. (She stops to answer a spelling question for a classmate.) I'd like to erase all this. I made a mistake.
R: What would you like to do?
A: I'd like to change this. I was supposed to put LIKE here.
R: What are you going to do?
A: I think I'll start over.

She begins again, stopping occasionally to comment on her own nervousness and finally finishes her piece thirty-one minutes later.

On 11/10/81 Anna's class was assigned to write rodeo stories. (Rodeos were a major theme the class had been working with in several centers.) The students were required to write three rodeo stories and then choose their best one to be made into a book for the class. Anna wrote this one:

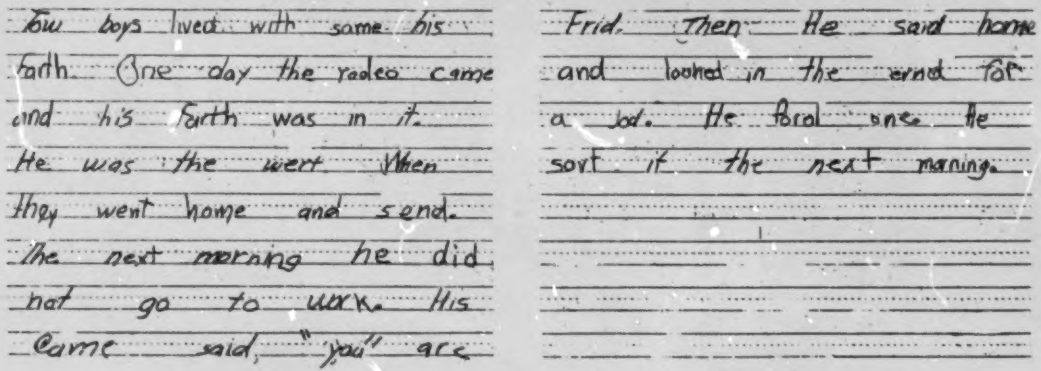


Figure VI-5 Anna's Text 11/10/81

Tow boys lived with same his
farth One day the radeo came
and his farth was in it.
He was the wert When
they went home and send.
The next morning he did
hat go to work. His
Came said, "you" are
Frid. Then He said home
and looked in the ernd for
a Jod. He forol one. He
sort it the next morning.

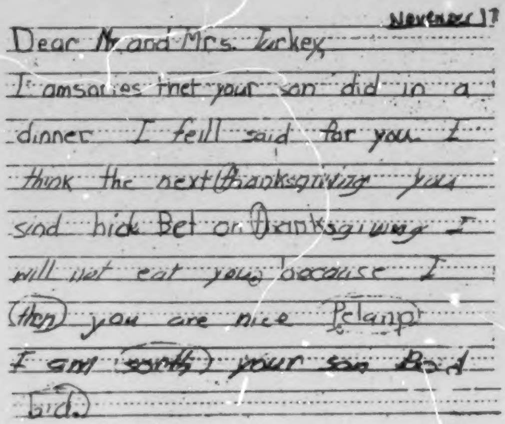
The boy lived with his father .
One day the rodeo came
and his father was in it .
He was the winner .
Then they went home and celebrated .
The next morning he did not go to work .
His captain said , " You are fired . "
Then he stayed home and looked in the newspaper for a job .
He found one .
He started it the next morning .

On this occasion Anna wrote quickly with few interruptions. She stopped to reread her text once, after HIS FARTH WAS IN IT on line 3, and referred to the wall dictionary for WITH and MORNING. After HE DID NOT GO TO WORK she stopped for a long pause before adding THE PEOPLE and continuing with her text. When she reached THEN HE STAYED HOME she went to the teacher for editing.

The editing process with the teacher was a very interesting one. They read the piece together and Ms. Howard suggested a few changes: SAME HIS in line 1 was changed to THEIR, WERT was changed to conventional spelling of WINNER and a period was added there. THEN was capitalized and SEND was changed to CELEBRATED. CAME was changed to CAPTAIN, FRID to FIRED and SAID to STAYED. Ms. Howard began asking some questions then about what happened next. Could Anna make the story end better? What did the father do when he stayed home? Anna came back to her seat and very quickly wrote the remainder of her story. The teacher made some editing corrections in the last part and Anna began planning how to fit this rodeo story to the pages of her new book to be "published" for the class.

On 11/17/81 (around Thanksgiving), the assignment was: "Send a sympathy letter to Mr. and Mrs. Turkey. They have just lost their son to a Thanksgiving dinner. Use correct letter form. Don't forget the date".

Figure VI-6 Anne's Text 11/17/81



Nevember 17
Dear Mr and Mrs. Turkey,
I amsories thet your son did in a
dinner I feill said for you I
think the next thanksgiving you
sind hide Bet on thanksgiving I
will not eat you because I
(then) you are nice Pelanp
I am (sorrty) your son Bod
bid.

Dear Mr. and Mrs. Turkey ,
I am sorry that your son died in a dinner .
I felt sad for you .
I think the next Thanksgiving you should hide .
But on Thanksgiving I will not eat you because I think you are
nice people .
I am sorry your son Bob died .

Anna shows in this particular episode that she is much more comfortable with letter form and becoming more comfortable with composing activity in general than she was in previous episodes. She checks the wall chart for spelling a couple of times and revises her text in the act of creating it without the same sort of anxiety she showed earlier. The text itself flows well and represents a considerable degree of empathy for a situation that might have been difficult because of its highly specified nature.

On 12/08/81 the assignment was to write a Christmas story. The students gathered together the day before and generated possible topics which Ms. Howard wrote on the board. They could choose any topic from that list for their Christmas stories. Anna chose to write about an elf who was making toys and got hurt.

Figure VI-7 Anna's Text 12/08/81

The elf was making a toy .
then he get hert
they rust him to the haror .
The next day Santa Claus and the other elf went to go see him .

They said we do not no whet is rond with him .
So the next morning they said he was died .

(copy of original text not available)

The elf was making a toy .
Then he got hurt .
They rushed him to the hospital .
The next day Santa Claus and the other elf went to go see him .

They said , " We do not know what is wrong with him " .
So the next morning they said he was dead .

This episode is a good example of how at times Anna's thoughts flow quickly during the composing process. In this particular situation she pauses for longer than five seconds only once. She writes THE ELF WAS MAKING A TOY. THE HE. Here she pauses. From this point on, she never even slows down for the remainder of the episode. She uses subvocalization (accompanying her written text with an oral rendition), stops twice during the remainder of the piece to ask another student how to spell a word and once to check the wall chart. It is almost as if the piece occurs to her in one chunk, and she can hardly write fast enough to get it all down.

The term subvocalization is defined in the context of this study as any vocalizing that accompanies actual text production. On different occasions the term may relate specifically to different kinds of activities. In one episode it may be a sounding out of an unfamiliar word and in that case is likely to be a letter-by-letter vocalization. In another episode it may be a kind of rehearsal activity of phrases or clauses where the writer tries out various alternatives before choosing one and proceeding. It may on another occasion be a "talking aloud" process where the writer accompanies writing with an oral rendition of the text. In each situation where subvocalizing accompanies writing an attempt will be made to describe what function it appears to have in that particular instance.

By way of summarizing Anna's development across this first segment of Year I, it seems appropriate to examine her progress in several major areas: social development, attitude regarding writing and her writing performance including development in semantics/pragmatics, syntax and orthography.

Socially Anna has adapted to her classroom very well. Since many of her classmates have lived in the Indian Oasis School District all their lives they know each other and have adapted well to each other and to Ms. Howard. Writing has a high priority in Ms. Howard's room, and Anna knows it is valued and responds well with a positive attitude toward writing even when it is difficult. In her first Concepts of Writing interview on 11/05/81 Anna indicates that what one needs to do to be a good writer is to "put words together and make them into a story." It is meaning-making which writers must do if they are good at what they do. Bad writers, on the other hand, "just kind of sit down. They never do anything. They just play around. They try to write an interesting story and they're not doing that. They're just playing around."

Anna has a clear idea of what her own writing is like when she has written well. It's good "when it's real exciting or something." She also knows what she needs to do when her writing isn't so good. "Or when it's boring you want to trade things around so it'd be kind of exciting." At this time she believes spelling is important in writing "'cause you get to know words when you write them." It is also important "so you can read what the story says."

Anna's concepts of good and poor writing and the importance of spelling are often evidenced by her behavior during the writing process. She often uses outside resources for spelling, but she doesn't allow not knowing how to spell a word to interfere with the flow of her thoughts. She writes something down as a placeholder, usually a real word with a strong sound-symbol relationship, but one that is inappropriate, e.g. GET for GOT, WERE for WE'RE, SAID for SAD, DID for DIED. It is as if she has a pool of linguistic data to choose from and rather than invent a completely new spelling she uses a word she knows she controls in some way. She continually expects her writing to make sense and when it doesn't she shows her dissatisfaction. At this early phase of the study she usually writes about real events and she likes for her writing to show what she has experienced. During her first bimonthly interview on 12/19/81 the researcher asked why she liked certain pieces better than others.

A : 'Cause I got to see this started and I wrote about it and I didnt't get to see these.

R: OK, so you wrote about something that you saw that you really liked.

A: Uh huh. (yes)

R: Ok. . . do you like to write about things that you've really seen, Anna?

A: Uh huh. (yes)

R: How come?

A:'Cause you see 'em, and you get to tell about them.

R: . . . And why do you like that?

A: So they'll know what it's like.

When questioned about the story she liked least, Anna said she didn't like the one about a fireman "'cause I didn't think what I was writing."

R: . . .Ok, if you don't think, then what happens?

A: Then you just write anything and when you read it to somebody you just. . . you. . . you make like. . .like. . .you make mistakes and you didn't do the right thing.

In this early interview Anna shows that she has a difficult time separating her affection for her topic from the value she assigns to the quality of her writing about that topic. If she doesn't like the subject she indicates she doesn't like the piece--it isn't good writing.

R: . . .Ok, why don't you like the wolfman story too much?

A: Um, 'cause it tells about these people that are always getting choked from this man, that when it gets full moon he turns to a wolfman and he kills these people.

R: Ok, and why don't you like that

A: 'Cause it's mean.

R: It's mean? Ok, what about the story, though. Why did you write that if you don't like it?

A: Um . . .(long silence)

R: You don't know?

A: (shakes head)

Conversely if she does like the topic or what happened in the story, then it's good writing.

R: Ok, Anna, what else do you like about this story?

A: 'Cause it was a good time.

R: Ok. You think that it was a good time and it was fun to write about it. Just looking at this, though, are there things here that you see that you especially like?

A: Uh huh. (positive)

R: What?

A: Um, like at the end. . . That's when they're all singing along...

At other points in the interview Anna indicates that good writing is longer than bad writing, and that she has difficulty creating good writing when she has to write about what's assigned rather than what she wants to write about.

But Anna's writing concepts and writing behavior do not always mesh, however. Even though she believes that rewriting or "trading things around" will improve her writing she rarely actually does it. Her behaviors indicate she often revises at the word level (to correct spelling or to "make it neater") or at the sentence level to include left-out words or to delete an inappropriate word or phrase. She rarely revises on the global textual level, however. Once written, a sentence is rarely discarded.

The term "local" and "global" levels of coherence in text are those proposed by van Dijk (1977). The term "local coherence" relates to the provision of lexical ties or provisions for providing connection within sentences or in relating one sentence to another and is identical to Halliday and Hasan's (1976) term "cohesion". Global coherence, on the other hand, must provide a semantic structure that relates all the propositions in the text. According to Bamberg (n.d.) who cites van Dijk (1980), to have global coherence a text must have an overall structure, plan or schema that orders the propositions. When Anna's composing activity, especially revision, is referred to as occurring on the surface or at most at the local level of text, she is revising within a sentence or on occasion across sentences to tie one proposition to another. Only rarely does Anna revise on a global level which in her terms means to "trade things around," to refine a plan for presenting the propositions of the text to a reader.

During this early phase of the study she has written two letters which require a stated audience. Pragmatic decisions are consistently appropriate in those instances. Her writing speaks directly to her audience. She consistently makes appropriate assumptions about what her audience knows or needs to know and how a writer executes letter format.

Her narratives are more complex, however. Here she often makes unreasonable assumptions about what her audience knows or needs to know. In THE WOLFMAN Anna probably has a clear picture of a horrible story about a werewolf who attacks innocent men and women. The police are generally inefficient at first but finally catch the guy in the end. Not all the needed detail gets to the page, and yet enough of the plot emerges to suggest at least a sketchy scary story.

The elf-story also is quite complex pragmatically. An elf gets hurt while working on a toy, gets rushed to the hospital and mysteriously dies the next morning. Certainly the potential for an excellent story is tucked away in this outline, but Anna's reader might find it difficult to imagine what Anna sees. Her sense of story as evidenced by each of her narratives in this early phase is well developed, including characters, plot and setting. What we would expect to see developing in subsequent stories is a fleshing-out of each area--more well-defined settings, characters more fully described and more detail to carry the plot development.

In the syntactic area it is interesting to note the variety of sentence structures that occurs during this early phase. She introduces dialogue in her first narrative, she uses both adverbial and nominal embedded clauses and she conjoins related clauses. She varies sentence structure order and expands both noun and verb nodes of sentences with adjectives, adverbs and prepositional phrases. She uses several different conjoins as cohesive devices (e.g. but, then, and, so) and either introduces or closes structures with adverbial phrases acting as conjoins.

Orthographically Anna's first chunk of data indicates that she controls an increasing number of sentence boundary markers, hardly ever inserts inappropriate punctuation marks (only twice) and occasionally omits commas. She does not know how to use quotation marks conventionally yet, but she does indicate that she has a vague idea of what they might be, since she uses one-half of a pair once: HIS CAPTAIN SAID YOU "ARE FIRED.)

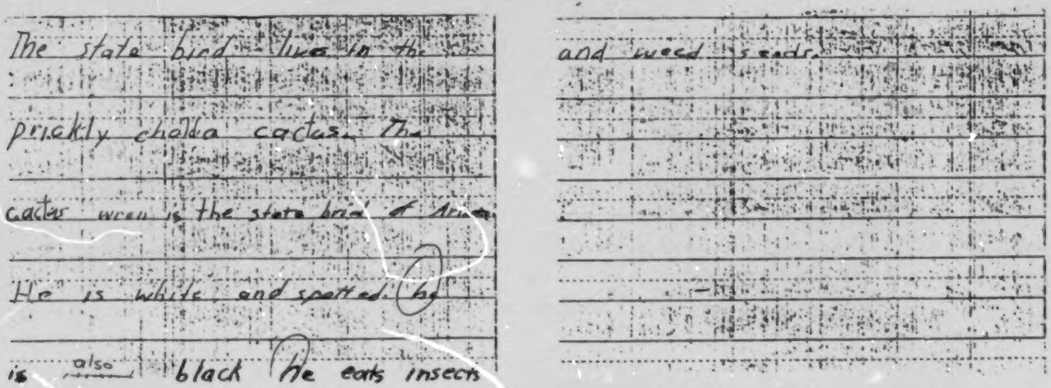
By this stage Anna hasn't attempted cursive yet. She writes only in manuscript. Only four letter formation problems are indicated, three B reversals and one D reversal.

Second Chunk: Year I

The second chunk of writing includes the pieces Anna wrote from after Christmas vacation to the end of February. The eight pieces include two expository pieces, five narratives and one piece which is a revised copy of one of the five narratives. This revised copy will provide some indication of what Anna views as a "final" product.

The first two pieces, THE STATE BIRD and THE STATE SEAL, were part of a unit planned by Ms. Howard to emphasize research writing. Each student was required to do some reading in encyclopedias and reference-type materials on Arizona and to then write seperate expository pieces on the state flag, bird, seal, tree and flower. The procedure was first to read the materials on Arizona (short articles and blurbs that were either in reference books or on the bulletin board), write about each of the major areas in their own words, and then draw a picture to illustrate their writing. Because these two pieces are parts of one whole assignment they will be considered together.

Figure VI-8 Anna's text 1/12/82



The state bird lives in the
prickly cholla cactus. The
cactus wren is the state bird of Arizona
He is white and spotted. he
is also black He eats insects
and weed seeds.

The state bird lives in the prickly cholla cactus .
The cactus wren is the state bird of Arizona .
He is white and spotted .
He is also black .
He eats insects and weed seeds .

Figure VI-9 Anna's text 1/14/82

behid the sal is som moutains with the sndt came up .
no the side of the matanains there is a storage resevoir and dam
.
in the middle are irrigated farm .

(copy of original text not available)

Behind the seal are some mountains with the sunset coming up .
On the side of the mountains there are a storage reservoir and dam
.
In the middle are irrigated farms .

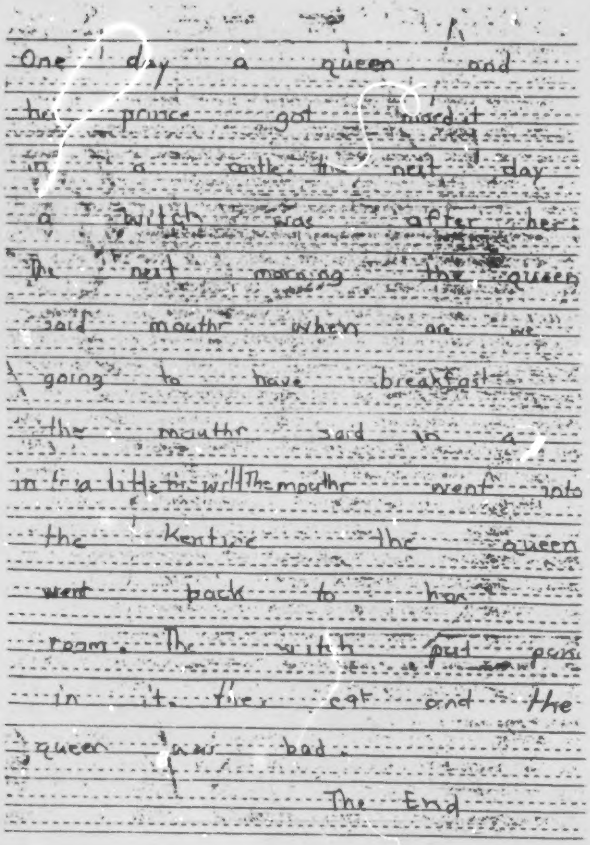
Anna spends less actual writing time on these two pieces than she has on others up to this point (an average of ten minutes as compared to an average of twenty minutes previously). She uses several resources: the bulletin board materials, handouts on procedures for this assignment and several people, including Ms. Manuel (the classroom aide), Ms. Howard and several classmates. Much of her spelling on both these pieces is copied from the resource material, e.g. prickly cholla cactus, Arizona, storage resevoir, irrigated farms.

The manual observation form from her piece on the state bird, 1/12/82, (See Figure VI-8) indicates that Anna is not investing much of herself in this piece. She copies quite a lot of information from the resource material rather than generating it herself, spends little time on the piece and then separates herself totally from the editing process. Usually when Anna takes a piece to be edited she remains involved in the editor's decisions about what may need to be revised and why. On this occasion, however, Anna takes the piece to Ms. Manuel to edit. While the corrections are being made Anna dances around swinging her arms, totally uninvolved in the editing process. She then gets new paper and rewrites, incorporating the changes Ms. Manuel has suggested.

Observation of the state seal piece written on 1/14/82 (See Figure VI-9) provides additional evidence that Anna is not terribly involved in composing for this assignment. When the writing center begins, Anna has already begun the piece and has completed the first sentence. She first rereads that first sentence aloud and then says to the researcher, "I don't know what to write." She talks to her seatmates, wiggles around, plays with papers in her folder and then reads the text printed on the state seal from the reference material. She asks the researcher what "storage reservoir" says and what it means. She rereads her text again, and then adds the sentence. When she finishes the piece and tries to read her text aloud to the researcher, she has difficulty with many of the words that have been copied from the reference materials.

The next unit in which Anna was observed writing was one on fairy tales. Instruction for this unit had centered on group editing and components of fairy tales, e.g. plot, setting and characters. On 2/2/83 Anna chose to write a very complicated fairy story about a royal family (the good guys), a witch (the bad guy) and a poisoning.

Figure VI-10 Anna's Text 2/2/83



One day a queen and
her prince got mard it
in a castle. the next day
a witch was after her.
The next morning the queen
said mouthr when are we
going to have breakfast
the mouthr said in a
in fra litte tir will The mouthr went into
the Kentive the queen
went back to her
room. The with put pois
in it. they eat and the
queen was bad.
The End

One day a queen and her prince
got married in a castle.
The next day a witch was after her.
The next morning the queen said,
"Mother, when are we going to
have breakfast?"
The mother said, "In a little while."
The mother went into the kitchen.
The queen went back to her room.
The witch put poison in it.
They ate and the queen was dead.
The End

Anna gets off to a good start. Her first sentence introduces her characters and starts the action. She begins to run into some problems pragmatically, though, when she has the queen asking her mother when they're going to have breakfast. (It's quite a reasonable request from a child to her mother but a little unpredictable when a queen does it.) While the queen waits for her breakfast, the witch puts poison in something the queen eats and the queen dies.

During this story Anna subvocalizes by talking to herself through the whole piece as she writes. From the beginning of the piece she writes hurriedly and appears to be totally involved. The noise and activity in the classroom don't tempt her attention and she writes uninterrupted to the end.

Her final product includes many invented spellings, only one of which is later revised. She changes IN A LILL to A LITTLE WHILE after reading the piece aloud to the researcher. Once during the initial writing she drops her pencil and seems to be confused a minute before she continues. She had written THE QUEEN WENT BACK TO HER 1 (erases), writes P (erases), and then writes ROOM.

The next piece of writing is also part of the fairy tale unit. On 2/4/82 Anna begins a story about a giant, decides she doesn't like it, throws it away and begins another.

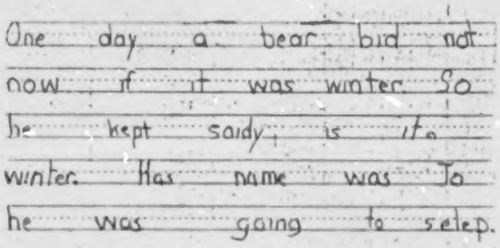
From the outset Anna has a difficult time getting started with this piece. She writes one sentence and half of another, decides she doesn't like what she's done and begins again. ONE DAY A GORD WAS NAME. She stops, erases GORD and asks how to spell GIRL. The researcher suggests that she spell it the best way she can. She tries and ends up with the conventional spelling. Her next difficulty is what she can call the girl. She stops and talks with peers and the researcher about what would be an appropriate name for the girl. She finds it extremely difficult to settle in on the task, however. She waves her arms in circles, writes the next sentence, picks up scissors and begins to shave wood off her pencil lead. She reads the last sentence aloud to the researcher and then brushes shavings off her paper. For the remainder of the piece Anna engages in a flurry of composing behaviors of all varieties. She uses resources for spelling, generates invented spellings, rereads parts of sentences, makes surface editing changes, stretches, yawns, and subvocalizes as she rereads.

Anna's composing behaviors in this piece suggest that rereading plays an integral part in her revising. After each behavior that is not a direct manipulation of the text, she seems to use rereading as a way to remind herself of what element of her story she was working on at the time of the interruption. The rereading seems to give her a running start to generate the next part of the text.

When she gets to BUT WHEN SHE WOKE UP SHE WAS SCARED on lines 8-9, she appears to lose either her train of thought or her interest in the story or both. She begins to play with a tape recorder on the table, talks to her classmates in the writing center, yawns and plays with her hair. She says to one of the other students at the table, "I wish it was time to go to lunch. I'm hungry." She and the others talk about the day's menu. She goes back to shaving her pencil again. When the researcher encourages her to get back to her writing, she dashes off the last two sentences. As she finishes the last sentence she sighs and says, "I'm finished--finished."

The fairy tale assignment is still in effect as Anna writes on 2/9/82. On this day she chooses an assignment from a list of possible fairy story titles that was generated by the group.

Figure VI-11 Anna's text 2/9/82



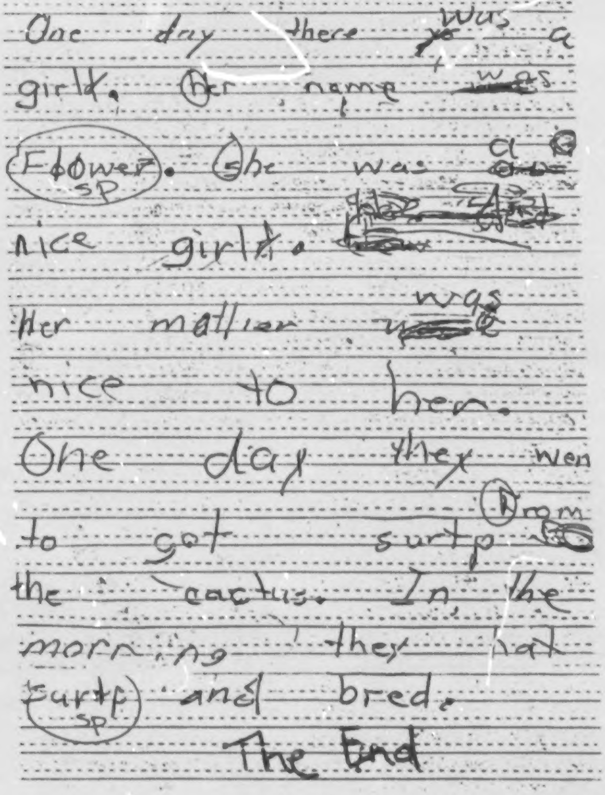
One day a bear bid not
now if it was winter So
he kept saidy; is it.
winter. Has name was Jo
he was going to selep.

One day a bear *did not know if it was winter .
So he kept saying , " Is it winter ? "
His name was Jo .
He was going to sleep .

As in the previous example Anna's composing seems to be a struggle here. She gets involved in talking with other students about a Superman movie they all saw on T.V. the night before. She carries this socializing into her composing process, though, as she gets them to help her spell words and think of a name for her bear. All her revisions are in conjunction with rereadings and are on a surface or local text level: she puts a period at the end of a sentence and adds a capital at the beginning of the next sentence and changes a lower-case H to a capital one. In the twenty-five minutes available in the center, most of it is spent socializing with her classmates.

On 2/23/83 the classroom aide had planned an assignment on Papago activities. Students were practicing rewriting poems in cursive, making rattles out of gourds, reading Papago legends and writing legends based on pictures of Native Americans engaged in various activities. Anna chose a picture of a girl with a large woven basket balanced on her head.

Figure VI-12 Anna's Text 2/23/82A (original version)



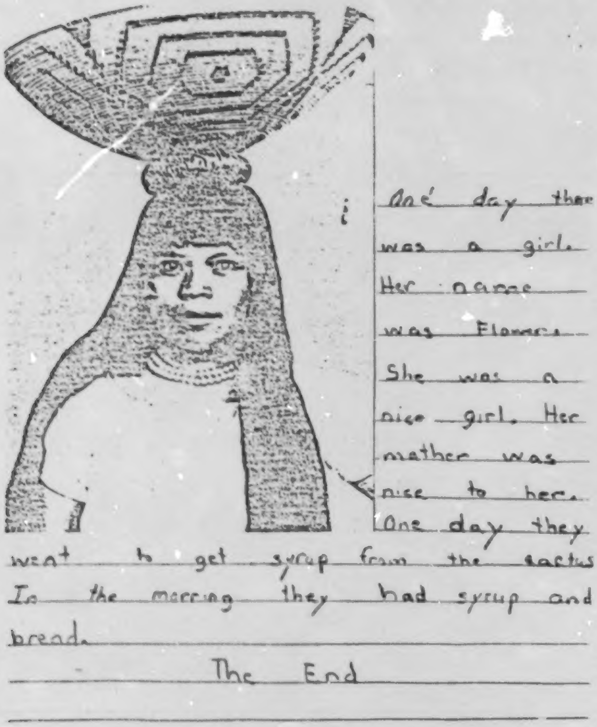
One day there ~~ye~~ was a
girl. Her name was
Flower. She was a
sp
nice girl.
Her mother was
nice to her.
One day they wen
to got surtp from
the cactus. In the
morning they hat
surtp and bred.
sp
The End

One day there was a girl.
Her name was Flower.
She was a nice girl.
Her mother wasn't nice to her.
One day they went to get
syrup from the cactus.
In the morning they had
syrup and bread.
The End

This piece is interesting in that it indicates a different kind of revision than Anna usually engages in. In this case she writes the whole piece fairly quickly; in fact, she stops only once to make sure she isn't going too fast for the researcher. As she writes she subvocalizes continually, talking out and rehearsing the story. She interrupts her actual writing only twice--once when another student makes a comment to her and once to get a Kleenex. Upon finishing the piece she reads it back to the researcher and discovers that her first sentence doesn't make sense to her. It was initially written as, ONE DAY THERE WAS A GIRL HER NAME WAS FLOWER. She stops, looks puzzled and says to the researcher, "It doesn't make sense." She erases WAS, capitalizes a small h, but still is not satisfied. The center ends before she has time to finish.

After the next center Anna has time to come back to her legend piece. She takes her rough draft to Ms. Howard who edits it with her. The final copy ends up looking like this:

Figure VI-13 Anna's text 2/23/82



One day ther
was a girl.
Her name
was Flower.
She was a
nice girl. Her
mather was
nice to her.
One day they
went to get syrup from the cactus
In the morning they had syrup and
bread.
The End

One day there was a girl.
Her name was Flower.
She was a nice girl.
Her mother wasn't nice to her.
One day they went to get
syrup from the cactus.
In the morning they had
syrup and bread.
The End

Anna's piece on 2/2[illegible]/82 is a continuation of the assignment requiring legend writing. She chooses a picture of a young Native man holding a bird he had just killed with his bow. The picture includes the text: "Once upon a time there was a warrior named Running Bear. What did Running Bear do in the story? Why did the story end like it did? Or maybe you can pick a better name for him and make up your own story or legend." In responding to this story starter, Anna writes quickly again as she did in her princess story, stopping only twice when she is interrupted by another student who needs help. She revises on a surface level as she progresses but doesn't invest much time on this piece, only ten minutes.

The emphasis in this chunk of Anna's writing has been in two major areas: level of involvement and editing/revising. It seems that when a narrative assignment is first presented to Anna, whether it is a fairy story or legend, she is willing and eager to invest her best energies. She chooses a topic readily, writes without interruptions, and makes revisions that will increase the readability of her text. After she has already written on that theme, however, it seems to be difficult for Anna to remain engaged. Then her behaviors become more concerned with fulfilling the requirements of the assignment. This inference seems to be corroborated by her mother's comment that Anna likes to write and chooses to spend some of her free time writing, but she doesn't like to rewrite and sometimes leaves a piece unfinished.

In the area of revisions Anna's behaviors indicate that she revises mostly on a surface or local text level, adding punctuation and capitalization, correcting spelling, adding or deleting words within a sentence. At this phase of the study she engages in very little global (whole-text level) revising. Global revisions seem to occur only when Anna is highly involved in the task at hand, when she seems to know what she already wants to say and how to say it. Rereading and revising then become ways to confirm or to correct her written text to make it more like the text she has in mind.

Looking at the major language systems that this study is investigating--semantics, pragmatics, syntax and orthography--it is important to separate the expository pieces from the narratives. In both expository pieces (See Figures VI-8 and VI-9). Anna's written product demonstrates the "things fall apart" phenomenon discussed in Chapter V of this study. Because this particular format is unfamiliar to Anna, elements of composing that she controlled earlier now fall apart. For instance in the first piece on the seal of Arizona, Anna's spelling is less conventional than it has been through the course of this study. Even fairly high frequency words like SOME and ON are spelled unconventionally in this piece. Syntactically neither piece is particularly interesting; only one has an embedded clause. Both pieces have limited information and in both cases, Anna has difficulty reading back what she has written. These pieces provide a baseline for examining later non-narratives, and it will be interesting to see how this particular genre develops as her facility with non-narratives increases.

The narratives are longer and more interesting syntactically than the expository pieces. Even though Anna is relatively uninvolved in a story about Sally being kidnapped (2/4/82), her product reveals a certain familiarity with the components of a fairy tale. She has characters, setting, conflict and resolution. Probably her best attempt during this phase of the study is the poisoned queen story (See Figure VI-10). Here Anna is at her best syntactically, semantically and orthographically. She has more words per T-unit then usual, embedded nominal and adverbial clauses, a complex variety of phrase level structure and expansions of both nouns and verbs. The piece is both cohesive and coherent even though only minimal information is provided relative to characters and plot. Orthographically she demonstrates some capital problems (5), and her percentage of conventional punctuation is only 47% whereas her average for the whole year is nearly 65%. She spells 87% of the words in the story conventionally, however (84% is the average for the year). An important point to remember here is that nearly all of these narratives are first drafts. Note that since Anna spends her undivided attention on this piece for more than twenty minutes, she must be attending to issues other than orthography. Both her finished product and her composing behaviors suggest that meaning-making is of primary importance to Anna.

Third Chunk: Year I

The third chunk of Anna's writing covers four pieces she wrote in March. The first three pieces all appear to be unfinished, which may be explained by other activities going on in the classroom during that time. The writing center assignments that Anna responded to during this period focused on animal legends, which are a significant part of the Papago culture, and a circus unit. During the week of March 2, Anna's class did a presentation on nursery rhymes at an assembly for the younger children. That activity influenced some of Anna's writing during this period. Much of class time this week was spent rehearsing for the presentation, which may in part account for the unfinished pieces. Also during March a professional clown visited the class during their circus unit and demonstrated his skills at clowning and at clown make-up. He spent some time doing make-up on each child.

The first piece Anna wrote in this chunk was a partial story about a girl in Kansas. In its limited state it reads as if she may have been about to retell a version of "The Wizard of Oz." The assignment for the center had been free writing. Anna's observation that day suggested she had a difficult time concentrating on work. She spends several minutes talking with classmates at her table and then leaves the center early to do an interview with one of the researchers.

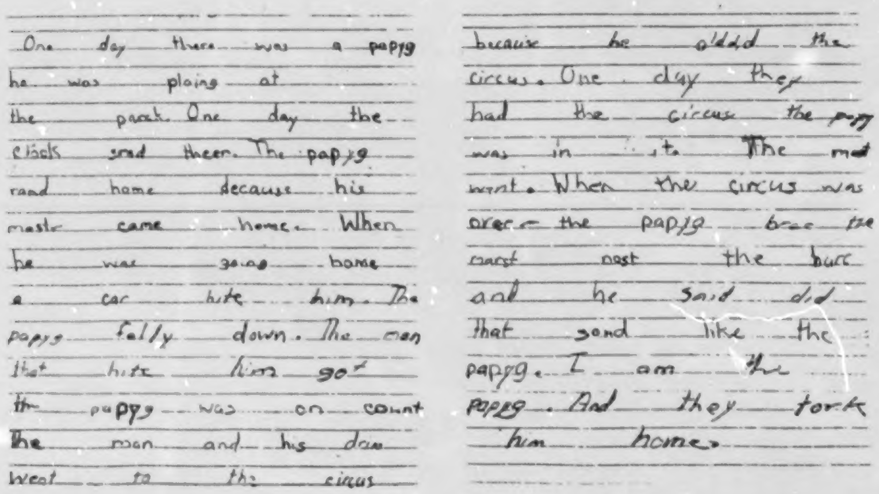
The next piece (3/4/82) was written the day of the nursery rhyme program. The presentation had been early in the morning, and then the students returned to the classroom to work. Ms. Howard was not at all pleased with their performance, and the group spent several minutes listening to her comments about what went wrong and why. That session cast a somewhat subdued mood on most of the children for the remainder of the morning.

Anna's piece for that day reflected their work with nursery rhymes since it appears to be a retelling of "Little Red Riding Hood." This piece too appears unfinished and the observational notes indicate she spent a lot of time engaged in activities unrelated to writing. She watches the math group play a math game, watches another student read her piece on tape, and spends a lot of time playing and arguing with another student at her table.

During the week of March 8-12, the writing center activities centered on the circus unit. On the bulletin board was a list of several suggested story titles including one about a boy who ran away to join the circus. Anna chooses that topic but doesn't write much. This was the day of the clown's visit and the whole class was excited. Even though he didn't come to the classroom until after the writing period was over, their anticipation kept them excited.

The last piece in this chunk is very different from the others. It is lengthy and finished and her involvement level is very high during the composing process. The crucial variable must not be the assignment since the same one is in effect as before--circus stories. Anna only involves the circus peripherally, though, as she writes this complex story about a puppy getting hit by a car.

Figure VI-14 Anna's Text 3/11/82



One day there was a papyg
he was ploing at
the park. One day the
clock srad theer. The papyg
raad home decause his
maste came home. When
he was going home
a car hite him. The
papyg felly down. The man
that hite him got
the puppy was on count
The man and his dau
went to the circus

because he olddd the
circus. One day they
had the circus the pupy
was in it. The mast
went. When the circus was
over the papyg bree the
marst nest the burc
and he said did
that sond like the
papyg. I am the
papyg. And they tork
him home.

One day there was a puppy who was playing at the park .
One day the clock struck three .
The puppy ran home because his master came home .
When he was going home a car hit him .
The puppy fell down .
The man that hit him got the puppy was unconscious .
The man and his daughter went to the circus because he owned the circus
.
One day they had the circus .
The puppy was in it .
The master went .
When the circus was over the puppy barked .
The master noticed the bark
and he said , " Did that sound like the puppy ? "
" I am the puppy . "
And they took him home .

This story is one of the most complex ones, both syntactically and semantically, that Anna produces during the study for both years. The story is 109 words long, has fifteen T-units, and two nominal and five adverbial embedded clauses. It makes an attempt at dialogue and, although she doesn't handle it very well, she tries to convey a very complicated, emotional plot. It isn't exactly clear what happens after the puppy gets hurt. Maybe it gets amnesia (she might have seen something like that on T.V.) or maybe it just gets separated somehow from its family. Nevertheless the dog gets reunited with the family in the end.

This is one of those occasions when Anna writes almost uninterruptedly from beginning to end. She hesitates before she begins to write, staring ahead and fiercely blowing bubbles with her gum. Then she launches in and only pauses to revise at a surface level, to reread or to consult resources, until she gets to WHEN THE CIRCUS WAS OVER on lines 18-19. At that point she pauses again for a long period and then finishes the piece. The ending does not come as easily as the earlier part of the story, though, since she stops to think several times and makes many sentence level revisions.

It is clear from the evidence provided by Anna's composing behavior and from a description of general classroom activity that many factors interact to both facilitate and deter Anna's composing. When she has a clear notion of what she wants to say, external unrelated classroom activity has only a minimal effect on her. When she is not either enamored of the assignment or compelled by a message of some sort, however, she is often distracted by others around her or provides the distraction for others. She has learned to incorporate social activity into her work process, though, and makes good use of others as a resource for ideas, clarification of procedures and confirmation of decisions in spelling, etc.

It was during this same period, March, that Anna was interviewed for the second time regarding her concepts of writing. It is interesting to note that at this time Anna still sees her own writing in the classroom as relatively mechanical. Even though she believes it is most important for writing to make sense, when asked the question, "What's the first thing you do when you write?" she presents a rather low-level skills picture of writing.

A: First I look at the pictures on the board and see what I'm going to write about. Then I start writing about that picture.

R: What do you do when you want to end it?

A: I just put an ending, like put "The End" or something.

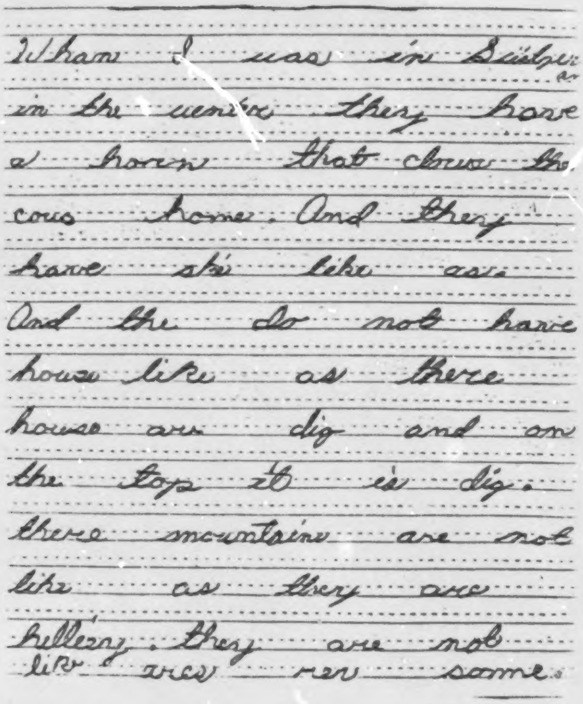
Nothing in what she says has anything to do with creating stories that make sense, yet that is what is most important to Anna. She often gives indications that she is dissatisfied with stories that don't make sense or are unclear when she reads them back to the researcher at the end of the center. Her dissatisfaction is never expressed verbally, at least not in any articulate way, but the message is made clear by her nonverbal language, facial expressions such as frowns and groans, and body language like slumping and head shakes. Sometimes rather than make revisions she will simply point out the problem, especially if she has shown a low level of involvement in that piece.

Fourth Chunk: Year I

The fourth and last chunk of writing covers the five pieces written from March 30 to May 6. They include a narrative about Switzerland (Ms. Howard was doing a unit on Switzerland in social studies), a letter to the classroom aide who was in the hospital, and three space stories.

On 3/3/83 Anna wrote this piece in response to the assignment to write about Switzerland.

Figure VI-15 Anna's text 3/3/82



Wham I was in Suitzer
ar
in the wenter they have
a horn that clows the
cows home. And they
have ski like as.
And the do not have
house like as there
house are dig and on
the top it is dig.
there mountains are not
like as they are
hillezy. they are not
like ares rev some.

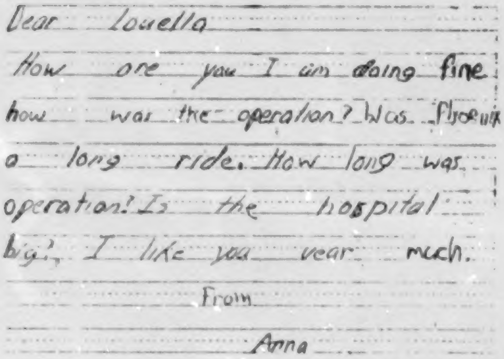
When I was in Switzerland in the
winter they have a horn that calls
the cows home.
And they have skiing like us.
And they do not have houses like us.
Their houses are big
and on the top it is big.
Their mountains are not like us.
They are hilly.
They are not like ours.
Really something.

Anna focuses on the differences between Switzerland and her own area, emphasizing those elements that could reasonably be compared. If Piaget is right, it must be difficult for a child raised in the desert all her life to imagine what life is like in someplace as different as Switzerland. Her strategy is to focus on what she experiences vicariously through the informational articles and pictures in reference materials. Her text does seem to indicate that she was somewhat speechless when she tried to describe some of the features of the Swiss landscape. To Anna they are "really something."

The behaviors in this piece indicate several revisions at a local level, many more than she normally engages in. Some of those behaviors may indicate that the assignment was particularly remote for her, but there could be other reasons. It is difficult to tell exactly how much, if any, of the behaviors associated with this piece are directly related to the fact that Anna was being videotaped as she wrote. By this time Anna had written while she was being recorded many times and seemed to be quite comfortable with the situation. After watching taping sessions across two years, all of the researchers agree that being observed either with or without video tape may encourage the students to be more task oriented than they might be otherwise.

The second piece in this chunk is a letter written to Ms. Lewis, the aide who worked for the writing project. She had to make a trip to a hospital in Phoenix for surgury, and Anna missed her.

Figure VI-16 Anna's text 4/14/82



Dear Louella
How are you I am doing fine
how was the operation? Was Phoenix
a long ride. How long was
operation? Is the hospital
big?, I like you vear much.
From
Anna

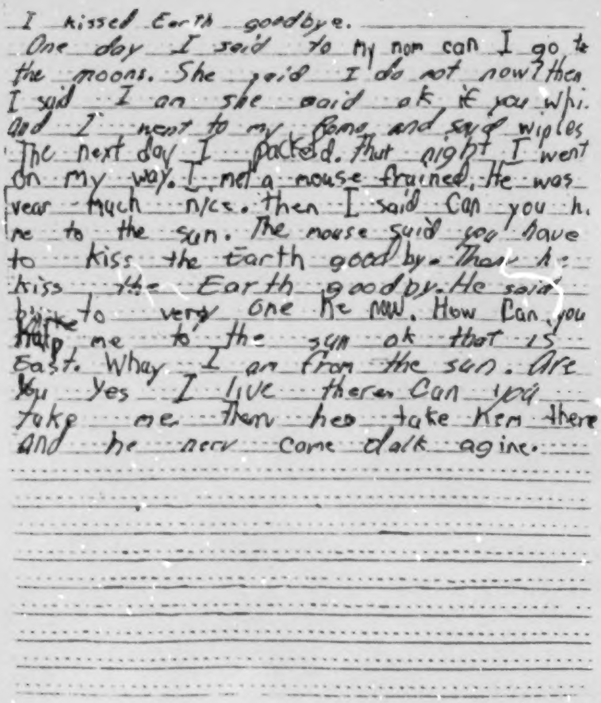
Dear Louella ,
How are you ?
I am doing fine .
How was the operation ?
Was Phoenix a long ride ?
How long was the operation ?
Is the hospital big ?
I like you very much .
From Anna.

The class was involved in standardized testing that day, so those not being tested at any given time were allowed to write on any topic. Anna sent the original of her letter to Ms. Lewis and kept a copy for herself. She seemed to be particularly pleased she had written the piece.

The last three pieces were all written in response to a unit on outer space. The students as a group generated an extensive list of titles and then chose their specific titles from that list.

The story on 4/29/82 was one of Anna's uninterrupted, stream-like stories that come out quickly and efficiently. Even though the story contains dialogue among several characters at different times, Anna manages to keep the characters fairly straight.

Figure VI-17 Anna's text 4/29/82


I kissed Earth goodbye.
One day I said to my nom can I go to
the moons. She said I do not now? then
I said I an she said ok if you whi.
and I went to my Rome and said wiples
The next day I packed. That night I went
on my way. I met a mouse frained. He was
vear much nice. then I said Can you h.
me to the sun. The mouse said you have
to kiss the earth good by. Than he
kiss the Earth goodby. He said
by to very One he new. How Can you
halp me to the sun ok that is
East. Whay I an from the sun. Are
you yes I live there. Can you
take me then hes take kem there
and he nerv come dalk agine.

I Kissed Earth Goodbye.
One day I said to my mom,
"Can I go to the moon?"
She said, "I do not know."
Then I said, "I am."
She said, "OK, if you wish."
And I went to my room
and said, "Yipee!"
The next day I packed.
That night I went on my way.
I met a mouse friend.
He was very much nice.
Then I said, "Can you help
me to the sun?"
The mouse said, "You have
to kiss the Earth goodbye."
Then he kissed the Earth goodbye.
He said by to everyone he knew.
"How can you help me to
the sun?"
"OK, that is easy.
Why, I am from the sun."
"Are you?"
"Yes, I live there."
"Can you take me?"
Then he took him there and
he never came back again.

This is one of those occasions where Anna talks herself through a composition, subvocalizing everything she writes. She stops occasionally to reread and make revisions, but for the most part her progress with the story is unheeded. It is her longest story of the year with 133 words and 20 T-units. The syntax plot shows a wide variety of T-unit types, adverbial, nominal and conjoined clauses, and varied phrase level structures with different kinds of expansions of noun and verb nodes and various kinds of connectors both within and across T-units. Because she doesn't yet control written dialogue, her punctuation statistics for this piece show only 29% correct. Eighty-seven percent of her spelling in this story is conventional.

The story is an interesting blend of reality and fantasy. She asks her mother if she can go somewhere, a very realistic sort of request for a nine-year-old, but where she decides to go and who she meets and talks to is all part of the fantasy.

The story definitely follows the guidelines for an appropriate story structure. It has characters, a plot, a conflict (how to get to the moon) and a resolution. Her last line, THEN HE TOOK HIM THERE AND HE NEVER CAME BACK AGAIN is certainly story-like. Without the cohesion problem it might be found in a published children's book.

On 5/5/82 the assignment was very specific; write about what you see as your spaceship lands on a strange planet and you look out your porthole. Ms. Howard had already prepared her piece on this assignment, and she read it to the class as a model for their writing. School was in session only a half-day for the students, and they were excited about having the afternoon off and eager to get out of class. For the most part it was difficult for all of them to stay on task. Anna's story was only one complete sentence long. Her behavior involved spending nearly all her time playing with Mike, comparing their heights, grabbing each other's papers and talking about many things unrelated to this writing activity.

The piece Anna wrote on 5/6/82 was the last piece of writing we got from Anna in Year I. It was part of the space story assignment, but it turned out not to be a space story after all.

Figure VI-18 Anna's Text 5/6/82

One day I went to space to
see how it lookes.
I did not now where I was
going because I did not make
plans.
I fell a sleep and whan I wine
up I was on Mars.
I said what I was doing her.
Evar time I looked out I said Hi
but no one said anything.
So I went. And rond to Earth.

(copy of original text not available)

One day I went to space to
see how it looks.
I did not know where I was
going because I did not make
plans.
I fell asleep and when I woke
up I was on Mars.
I said, "what was I doing here?"
Everytime I looked out I said, "Hi."
But now one said anything.
So I went and returned to Earth.

The setting is in space but the story actually involves a very realistic situation, waking up and not knowing where you are. In fact one of the lines she edited out was AND SAID WHERE AM I? She replaced that phrase with HI in the final version.

She talks her way through this piece as she has with some others. She stops to think often and rereads as she resumes the physical act of writing again. She makes several revisions in this piece and, in her words, "trades things around" to help the story make sense. When she stops for a long pause toward the end of the story, the researcher asks her what she's thinking about. Anna says, "What to say next." After she finishes the whole piece she rereads it to the researcher and adds a period she had missed earlier.

There seem to be two particularly interesting features of Anna's writing worth discussing in summation--effect of the assignment and level of involvement, two separate issues that are actually related in Anna's case.

It seems that the more specific and detailed the topic, the more difficult it is for Anna to "own" it for her own writing. This point may be applicable to all of Anna's writing for Year I, but two examples emerge in this particular chunk. On 5/5/82 when Ms. Howard both models how the children should write and specifies what they should include, Anna has a difficult time with what to say. Her final product ends up being one sentence only: ONE DAY I WENT TO GO TO JUPITER TO SEE WHAT IT'S LIKE." Observations indicate that she engaged in a lot of behaviors unrelated to the writing situation. The issue is whether the behaviors distracted her attention from writing or whether she engaged in those behaviors because of her difficulty with that narrowly defined topic (or for some totally other reason). It is an important issue which will have implications for instruction if a clearer relationship between type of assignment and behavior can be established.

The other major issue relative to this chunk of writing is level of involvement in the writing episode. This issue relates to the first because Anna appears to control a topic more effectively, exert more energy in the task and maintain a more intense level of involvement when the topic is general rather than specific or when she ignores the specificity of the assignment and makes it more what she wants it to be. Two examples occur in this chunk. In the piece Anna wrote about Switzerland (See Figure VI-15) she has the latitude to focus on what she has experienced rather than to write on a specific feature of Switzerland. Even though this piece is difficult for Anna, she maintains a reasonably high energy level, perhaps because she can choose to say what she has in mind and not address herself to an issue she has no interest in.

The last piece (See Figure VI-18) is also a good example of how Anna manipulates the topic to suit herself. She doesn't really write a space story but instead writes about a very realistic phenomena which may have happened to her personally.

It may be that children this age need to write about concrete, personal topics and not abstract, impersonal ones. For Anna that certainly seems to be the case. That issue will be extended to the examination and discussion of Anna's Year II data.

Table VI-1 Words per Story: Anna Year I

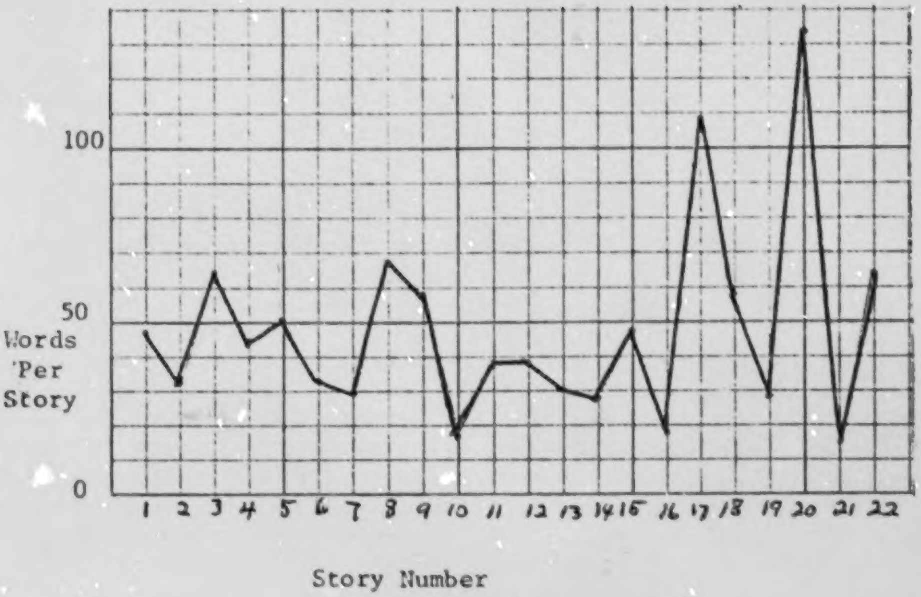


Table VI-2 Words per T-Unit: Anna Year I

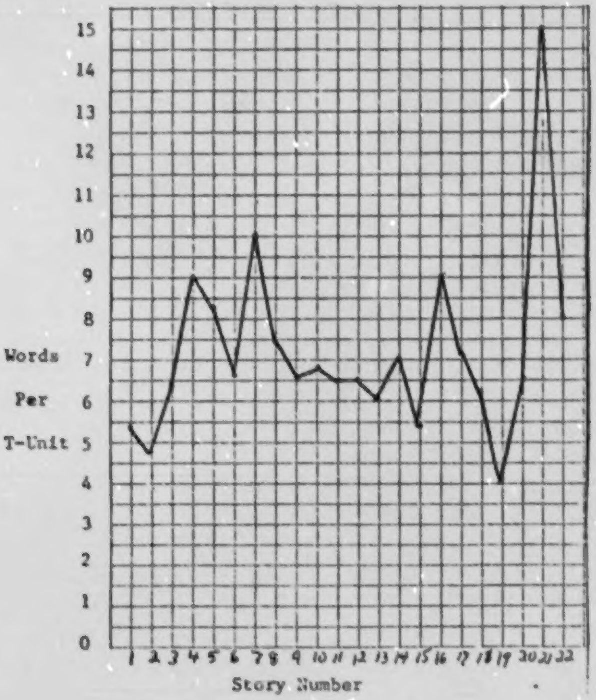


Table VI-3 Clauses per T-Unit: Anna Year I

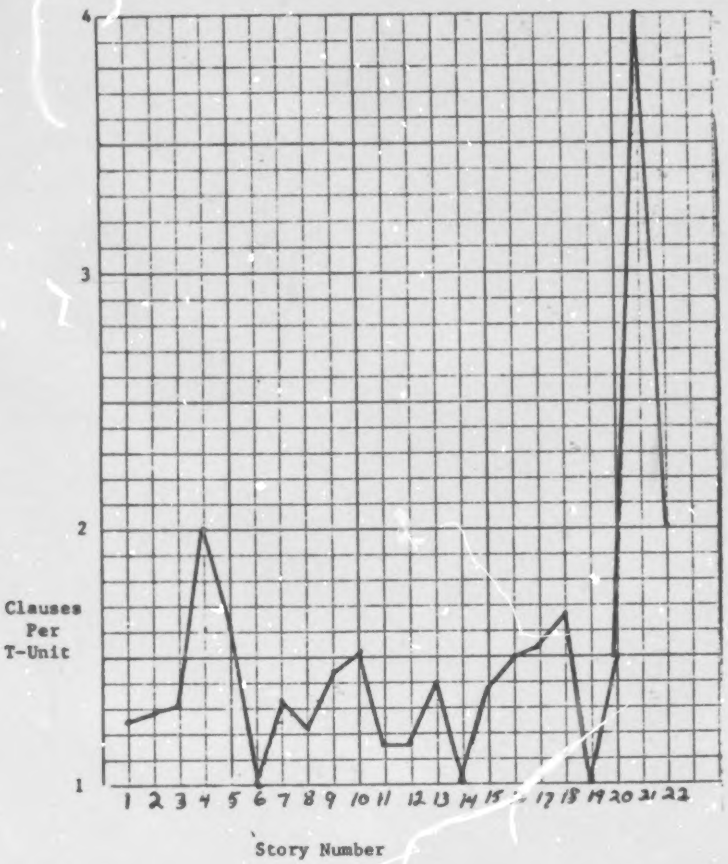


Table VI-4 Syntactic Development: Anna Year I

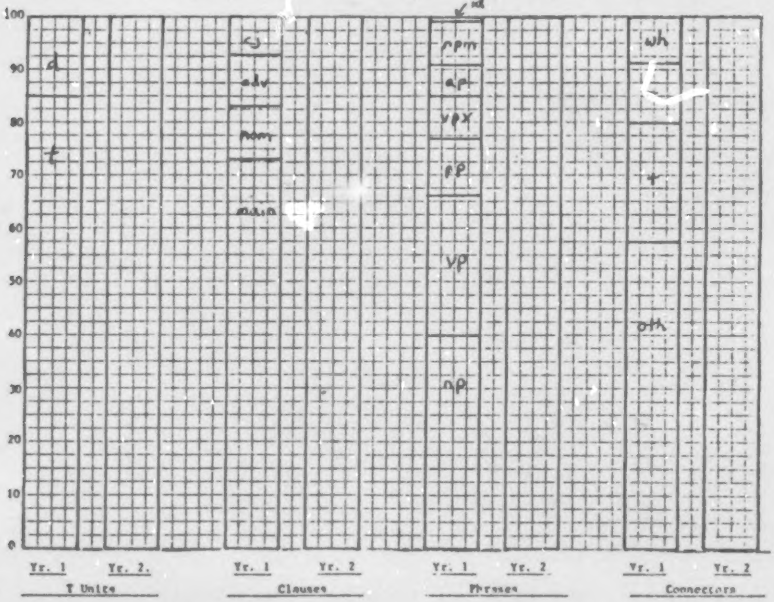


Table VI-5 Percent Conventional Spelling: Anna Year I

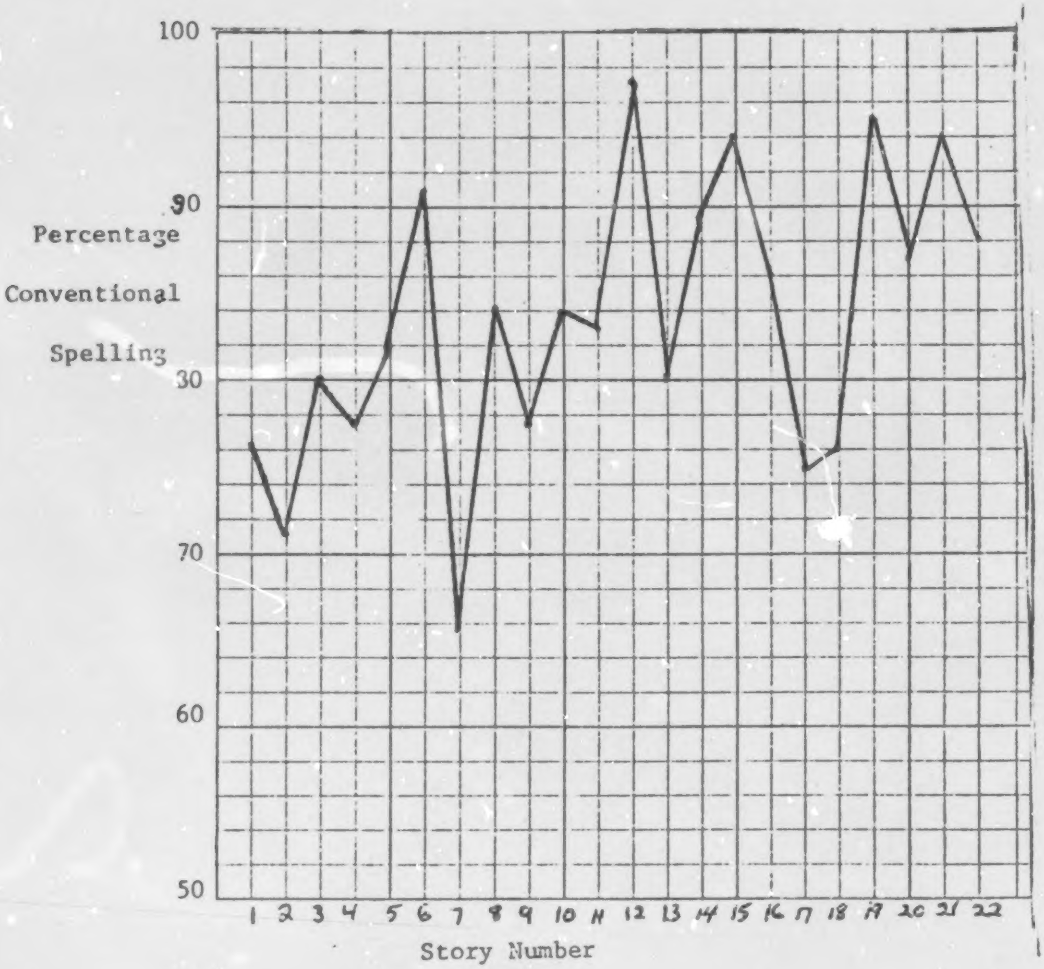
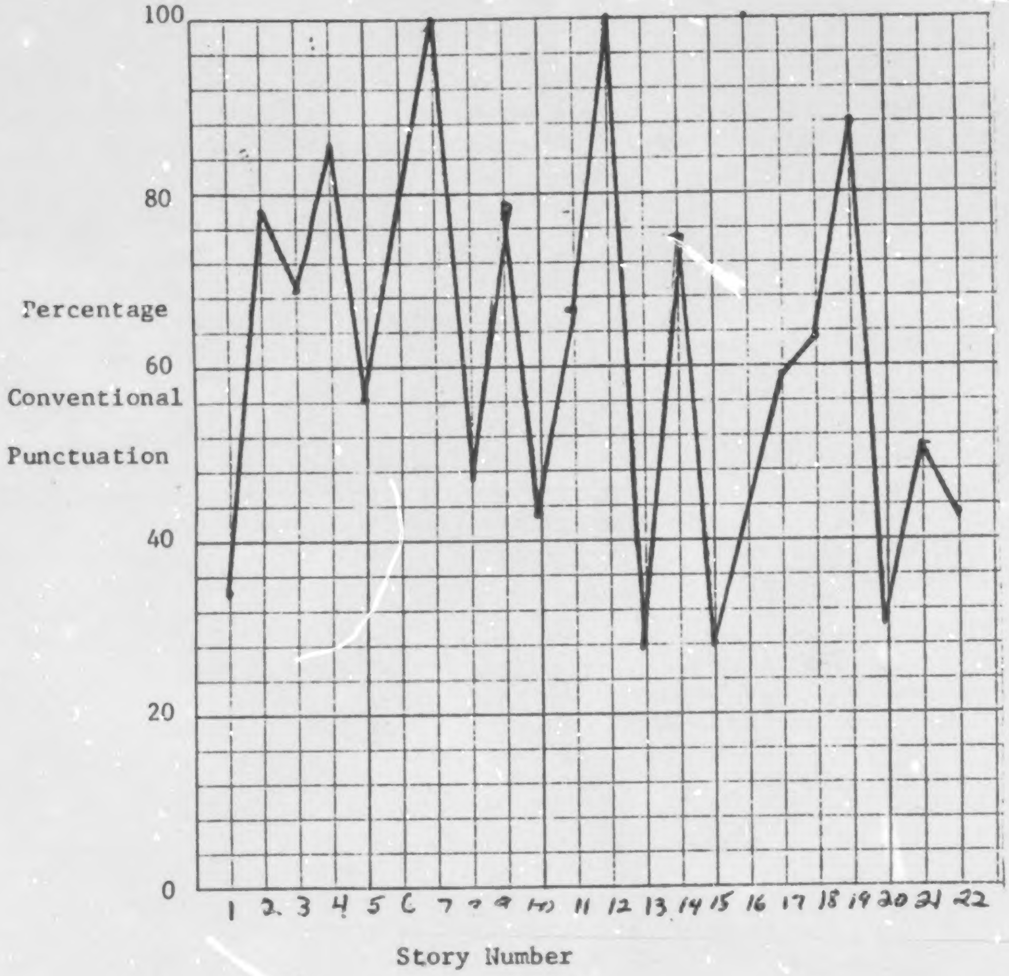


Table VI-6 Percent Conventional Punctuation: Anna Year I



Development of Linguistic Systems: Year I

By way of summarizing Anna's development as a writer across this first year of the study, the three linguistic systems--syntax, orthography and semantics/pragmatics - will serve as organizers for presentation of the summary data.

Syntax

Table VI-1 presents a picture of words per story for all stories in Year I. Although length in itself is not a crucial variable in syntactic development, it can serve as a comparison of Anna's stories within each year and across both years and with other subjects in the study.

It is clear that as the year progresses Anna's story length fluctuates greatly. Her longest story of the year and her shortest are produced close together, on April 20 and May 5. As the previous discussions of individual writing episodes indicate, many factors interact to determine both the quantity and the quality of a writer's performance across time.

In the area of syntax, Hunt (1970) and others (O'Donnell, Griffin and Norris, 1967) have indicated that several indices are particularly valuable for assessing syntactic growth for young writers. According to Hunt the most valuable index of development in syntax for ten-year-olds is words per T-unit. Table VI-2 illustrates words per T-unit for each story Anna produced in Year I.

The graph illustrates that Anna's words per T-unit across Year I do not follow any sort of linear developmental trend but rather demonstrate a saltatory pattern (i.e, fluctuating up and down (Werner and Kaplan, 1952). From the earlier discussion of Anna's writing episodes it is clear that many factors--social, academic and personal--interact within the writing episode. It is therefore to be expected that no straight line of development would be visible in such a short period of time. It is possible that if a graph was made of any other twenty-two pieces of writing that Anna produced during the same year, the words per T-unit graph would look quite different. It is because of this that we strongly conclude that using one piece of data to draw conclusions about or to evaluate a child's writing is unwise at best.

By November 10, when Anna adds conjoined clauses to the embedded nominal and adverbial clauses she had produced previously, she produces all types of clauses in her writing. From this point on, her development involves embedding more information within clauses (e.g. adding prepositional phrases, adjectives and adverbs) as the year progresses. Since she is not adding new types of clauses it is clear that she is increasing the quantity of information within clauses rather than extending the type.

Table VI-3 illustrates Anna's clauses per T-unit for each story in Year I. There is no linear direction to the development of clauses per T-unit, but it seems likely that the overall development of clauses per T-unit across the two years will increase. Hunt's research (1970) has provided evidence for this hypothesis which will be analyzed in Year II.

Table VI-4 represents the percentage of the total of each type of T-units, clauses, phrases and connectors. (It should be noted the T-unit division collapses some categories from a finer analysis; the dialogue T-unit type includes dialogue questions, dialogue imperatives and dialogue exclamations.) Headings were also eliminated from the T-unit representation since they are not true T-units.

What is apparent here is that Anna has used all of the major T-unit, clause and phrase types. During this first year Anna uses equal numbers of adverbial and nominal clauses embedded within the main clauses. On the phrase level this graph illustrates that Anna uses more noun phrases than verb phrases. When prepositional phrases are considered separately relative to function, however, the adverbial percentage increases. Of 57 prepositional phrases that Anna produced in year I, 53 or 92% act as adverbials. Examining this information for Anna only within this one year doesn't provide much valuable insight. When Year I and Year II statistics are compared, however, and when Alice's results are compared to the other subjects in the study, a more detailed picture of Anna's syntactic development will emerge.

Orthography

The summary of Anna's Year I orthographic data includes information relative to spelling, punctuation, capitalization and letter formation.

Spelling

Table VI-5 illustrates Anna's percentage of conventional spelling during Year I. The same saltatory developmental pattern occurs here as in the syntactic data although here there is a definite trend toward increased conventional spelling. It is important to note that at no time did Ms. Howard present formal group instruction in spelling. Progress in conventional spelling resulted from Anna's growing knowledge of the English spelling system, supported by the use of human and physical resources: peers, teachers, aides, researchers, dictionaries, wall charts, bulletin board materials, etc., as they were needed in the functional context of producing text.

When Anna's spelling patterns are examined more closely across all the texts presented for the study in Year I, several interesting patterns emerge. First, when Anna isn't sure how to spell a word she often substitutes a real word which is similar to but not the same as the word she needs in this particular context. It is possible that she pulls from a linguistic data pool words that she already has available rather than produce new words or non-words. Across Year I several examples of this kind of behavior are evident: eat for ate, bother for brother, bet for but, send for celebrated, came for coming, bad for dead, did for died, no and new for know, sad for said, work for woke and many others. In many instances word length is identical and often one vowel is substituted for another.

Second, only eight words of all the text produced for the study in Year I were spelled unconventionally more than twice. Each of those eight words will be identified here since together they provide insight into Anna's strategies fo inventing spelling.

GOT was spelled GET three times, twice in one story, October 20, and once on December 8. It was spelled conventionally five times. KNOW was spelled NO once on December 8, and as NOW three times, once on February 9, once on April 29 and once on May 6. It was never spelled conventionally. MOTHER was spelled unconventionally four times; once as MATHER on February 23; and three times as MOUTHR, all in the same story on February 2. It was spelled conventionally twice during the year. PUPPY was spelled uncoventionally eight times, all in the same story on March 11. Seven times it was spelled PAPYG and once as PAPUG. It was never spelled conventionally. REALLY was spelled unconventionally as REV on March 30 and as REAL twice on October 29. The latter might be considered a conventional spelling of Anna's dialect preference. SCARED was spelled unconventionally three times, as SARYD, as SARND and as SRANOL. It is with this one word that Anna demonstrates the weakest strategies for generating invented spellings.

THEY was used twenty times during Year I and was spelled conventionally sixteen of those twenty times. On December 8 it was spelled THAY twice and the same way on February 4. On March 30 it was spelled THE.

US was used three times in Year I texts. It was never spelled conventionally and was always invented as AS. All other words of text generated in Year I, 1104 words, were either spelled conventionally or unconventionally on either one or two occasions.

Observational data of Anna's writing episodes indicate that she frequently used resources for spelling and that the incidence of resource use increased across the two years, especially in Year II even though no direct instruction in resource use took place. Specific data will be reported later on the issue of resource use across the two years of the study

Punctuation

Table VI-6 shows the percent of conventional punctuation for Year I. This graph illustrates that no linear development occurred in Anna's Year I punctuation data. In fact the pattern is so uneven as to suggest that punctuation behavior is dependent on the type of punctuation required by the story content, the writer's control over that punctuation type, other cognitive and linguistic demands, and the constraints of the context interacting within each writing episode. A closer examination of types of punctuation and percentage correct for each type follows.

In the area of commas, percentage correct across all stories in Year I was 3.2. That number indicated that one comma use out of 31 possible was correct. With periods percentage correct across all stories was 73.5 or 108 correct uses out of 147. This number indicated Anna's best control of all punctuation marks. For question marks the percentage correct was 26.7 or 4 correct uses out of 15 possible uses. One exclamation mark was expected in one story, but Anna omitted it. Quotation marks were particularly unused by Anna. She used only one correctly out of 53 possible occurences, or 1.9 percent.

A more detailed examination of the stories which elicited both the lowest and highest marks in punctuation helps to provide a more detailed picture of the contexts in which Anna produces extreme performance in punctuation.

In three stories Anna's punctuation was 100% correct. The first story was written on January 14 (See Figure VI-9) when Anna produced an expository piece, THE STATE SEAL. On that occasion Anna's use of resources was extremely high. The piece was not being generated out of experience or imagination but was, for the most part, being copied from resource materials, the bulletin board, short articles and teacher-prepared materials. All three of the sentences are simple declarative sentences and there were only three T-units containing 30 words. Since Anna has demonstrated control over most sentence boundaries, it is not surprising that she would reach 100% correct punctuation in this story.

February 23 (See Figure VI-12) is another instance in which Anna demonstrates complete control over punctuation. This story is the only rewritten draft that was produced for the study [illegible] Year I.

On March 9 Anna wrote an unfinished piece about running away to the circus. Many factors contributed to confusion and distraction on that day, and Anna was unable to complete her piece. Since she wrote only two complete declarative sentences, it is not surprising that she achieved 100% correct.

The story with the lowest correct percentage of punctuation occurred on April 29 (See Figure VI-17) when Anna wrote the piece I KISSED THE EARTH GOODBY. The piece has 20 T-units, 13 of which are dialogue. Six of those dialogue T-units also involve questions and exclamations. Since Anna is experimenting with new forms which she doesn't control very well, it is reasonable to expect her not to do well when those punctuations are required.

Capitalization

It is interesting that Anna produces non-conventional capitalizations in Year I only at the beginning of a word. Nineteen problems occur at positions other than at the beginning of a sentence, and since these are most interesting, the non-conventional patterns will be discussed here.

Two times Anna capitalizes the word FATHER when a determiner precedes it; November 10, "The boy lived with his Farth (father)". Six capitalization problems occur when a proper noun is not capitalized: February 25, "a boy named warrior," April 14, "Was phoenix a long ride?" One non-conventional form occurred in a title: April 29, "I Kissed Earth goodby." In one situation, November 17, Anna writes, "I think you are nice Pelamp." It is interesting that the Papago term for their own tribe may be translated as the People and would be capitalized when written.

One capitalization which may have an interesting possible explanation occurs. In Anna's story of November 10, she writes about a father who loses his job. His employer says: "You are Frid (fired)." The punctuation data illustrates that Anna does not control exclamation marks; in fact the only end mark punctuation she does control is the period. This information suggests that Anna may have used the capital letter to emphasize the word since she doesn't know how to suggest emphasis otherwise.

Two final examples relate to the issue mentioned earlier of Anna's use of a real word in inappropriate situations. On April 29 Anna wrote: "I went to my Romo (room) and said. . ," and in the same piece she wrote, "O.K. that is East (easy)." One of several possible explanations may account at least in part for the inappropriate capitalization that occurred in both situations. Romo is the last name of one of Anna's close friends. She may have written the capital "R" as a mistake, and then her automatic pilot took over to help suggest the remainder of a familiar word. Or she could have been thinking of her friend at the time and that may have played a part in the "R" initially. Certainly the two words are graphically similar, and a miscue of this variety is not at all unusual even for accomplished writers. The "East" example is similar to the previous one. Its occurrence in this context could have a relationship to many external variables present in this particular episode, including a discussion of directions, which is actually the content of the message in which the miscue occurs. The main character is asking how to get to the moon.

Letter Formation

The letter formation data will be examined from the perspective of two separate issues, letter reversals and manuscript versus cursive. Across all 22 stories in Year I, 1104 words, Anna had only 13 letter formation problems. All but one of those were b/d reversals. Of her 12 was almost copied verbatim from resource material. Therefore the elements that an expository piece is often evaluated on--purpose, content, structure and audience awareness--have not been given much attention. It is not clear what the purpose of the piece is; the content is meager; the structure is not well ordered (sentence two should probably occur before sentence one); and there is no indication that an attempt has been made to consider an audience. Virtually the same evidence exists for the other expository piece, January 14 (See Figure VI-9).

The end product is probably not the essential ingredient in this composing activity, however. Ms. Howard indicated that she assigned this research unit because she wanted her students to begin to investigate different kinds of resource texts and learn that a different kind of writing results from research on a topic. Some work with Arizona history is a required element of social studies at all grade levels in the state of Arizona, and Ms. Howard combined both objectives in this activity.

Observations of the composing process indicate, though, that Anna was overwhelmed by the task. There was no involvement on her part in this assignment; she didn't own this piece of writing. Because the asignment did not occur in a context which was functional for Anna,success was unlikely. When the function did not allow enough energy for the task, meaning and form could not emerge. Meaning cannot be generated in a vacuum; consequently Anna could not perform successfully on this assignment. It is interesting to note that the lack of success in this piece is not revealed by syntactic and orthographic data; it is only when the semantic/pragmatic issues are examined that the problem in revealed.

The letters present an effective counterexample to the expository pieces. In each of the three letters Anna produced, she meets the basic semantic/pragmatic requirements to a certain extent. Even on October 29 (see Figure VI-4), when Anna is just beginning to get comfortable with composing in the classroom, she produces an effective letter. Anna's spelling and punctuation are not highly controlled in this letter, but the energy behind the function of this text is evident. Anna saw the program and was excited, delighted, and scared all at once. All of that information comes through in this piece. She writes directly to a specific audience, and although she doesn't provide specifics of what elicited this particular emotion, the emotion is clear. Function exists and the text that results is meaningful. Therefore even though form is far less than perfect it does not seriously hamper the communication of Anna's intended meaning.

The letter Anna wrote on November 17 to Mr. and Mrs. Turkey (see Figure VI-6) meets the same basic requirements of the one just discussed. Even though this letter wasn't written to a real "person" and surely wasn't mailed, some function is obviously being met, perhaps that of eliciting imagination. Anna's stories across the two years suggests that she has a vivid sense of humor. It is just this kind of activity, writing a letter to turkey parents whose son was eaten on Thanksgiving, that Anna seemed to enjoy. The observational data reversal problems, 7 were "b" reversals (out of 38 "b's" produced across all stories) and 5 were "d" reversals (out of 175 "d's" produced). When examined within the total context of "bs" and "ds" reversed, Anna reversed 3.34% of all letters likely to be reversed because of graphic similarity.

The only other letter formation problem Anna has is related to the issue of learning cursive. Anna expressed impatience many times when she was encouraged to write in cursive. She said it slowed down her writing, and she often forgot what she was writing about when she had to take the time to form familiar letters in unfamiliar ways. On March 4 Anna wrote: SHE WAS A NICE GIRL. The second half of the W in WAS merged with the A; therefore the W is formed incorrectly. It is probably safe to say that letter formation problems are not a major issue in Anna's writing development in Year I.

Semantics/Pragmatics

Semantic and pragmatic issues will be discussed concurrently beginning with an overview of a semantic/story structure analysis that was completed on each narrative and continuing with a discussion of genre, topic, and content, providing additional information on the social context in which the stories were written, when that information provides insight into the composing event.

For the purposes of this study genre has been defined as four different kinds of texts produced: narrative, expository, letters and a catch-all category labeled other. For the most part, the genre of a particular piece had been stipulated by the assignment. On only one occasion when researchers were present during Year I were subjects allowed unassigned writing. On that occasion Anna wrote a letter to the classroom aide who was in the hospital. During Year I Anna wrote 17 narratives, 2 expository pieces, and 3 letters (including the one mentioned above).

Genre

The differences among these genres as Anna presents them are clear. The narratives, perhaps because there are so many of them, represent a wide variety of performances in all areas. Anna also has had several successes with narratives, and the story structure data clearly shows that she knows how to produce an effective narrative. Whether she controls story structure or not on any give occasion is dependent on the complex combination of variables already discussed.

The two expository pieces, if they were to be judged on final product, would be termed unsuccessful at best. It is important to note that these two pieces are among the only assigned expository pieces Anna has ever written. It is likely, too, that much more of her reading material has been narrative than expository, so she probably has no definite schema for expository writing like the kind she is being asked to produce here. The state bird piece, January 12, (See Figure VI-8)

The March 1. elaborate story about a puppy getting run over by a car and ending up in a circus came from a cartoon Anna saw on T.V., and *I KISSED THE EARTH GOODBY* was influenced by another story the teacher read to the class which had a mouse as the main character.

It is clear that a complex combination of events interact to create the events of the writing process and the product that results. The writer comes to the writing event with a set of social, academic and personal variables which provide a unique setting for each composing activity. An examination of this process will continue with Anna for Year II.

Composing in the Social Context: Year II

One vitally important piece of new information related to Anna's writing development in Year II is that near the end of Year I, Ms. Howard made the decision that Anna's academic development had not progressed as it needed to for her to do well in fourth grade. Advancing to fourth grade in this school district involves moving from one school to another, from an elementary school that includes grades K-3 to a middle school that includes grades 4-6. The philosophy of the middle school is somewhat different from that of the elementary school in that the acquisition of basic skills in the language arts is assumed to have already taken place. Hence, a much stronger emphasis is placed on content area instruction as opposed to an integrated view of language arts. Anna's parents concurred with this decision to keep her back another year because they, too, believed Anna was not adequately prepared in basic skills.

Children from all the third grade classes who were identified as not ready to move up to the other school were combined in one class labeled pre-fourth grade, at the elementary school. Anna was familiar with most of the children in her new class. Three others are part of this study.

Early in the year the class seems particularly quiet, with children almost always speaking in near whispers to others at their table where they work singly although their seats are arranged in small groups. Their teacher, Ms. Caldwell, provides a very warm and friendly atmosphere for learning but insists that children be respectful and supportive of each other's needs as well as their own. Ms. Caldwell is particularly effective in not raising her voice at any time. It is sometimes difficult to tell that she is present since she is difficult to hear and see, being petite and soft-spoken, and yet her managerial presence is always evident. If a student gets into trouble, either academically or socially, she is not far away and intercedes to help get the problem cleared up.

First Chunk: Year II

The integrated view of language and composing that serve as framework for presenting the data in Year I will be maintained through suggests that Anna's level of involvement was high on this piece. Her final product confirms it.

Anna's third letter was the one free writing activity that Anna wrote on April 19 (See Figure VI-16). She is concerned about Ms. Lewis and has many questions that need to be answered. Purpose, content and structure are clear and appropriate.

Anna's Year I data seem to support Halliday's (1975) contention that form follows function and that meaning-making that originates from energy supplied by that function is crucial to the success of both the process and product of written language.

Topic and Content

The topics of the stories Anna produced across Year I were almost exclusively determined by the teacher's assignment. The content of the narratives, though, was always Anna's choice and often reflected events occurring in her life both inside and outside of the classroom (see Bird, forthcoming).

During October the major topic for writing was Halloween, including ghosts, goblins, ghouls and werewolves. Anna chose to write a story about a wolfman which she said she didn't like because "he was mean." She said she had seen something similar to this story on T.V. so media probably have at least some effect on the content of Anna's stories even though she says she doesn't watch T.V. much.

Rodeo was a major topic in November. Every fall the Papago tribe sponsors a big rodeo/carnival event, so community activity of all kinds is directed in that area. Anna uses the rodeo idea to begin her story, but she quickly drops that topic and moves to a more human interest topic of a father losing his job and looking for a new one. She indicated that this story was actually about a friend of the family who had had this particular incident happen to him.

The only story Anna wrote for the study in December was one about a Christmas elf who gets hurt, is rushed to the hospital and mysteriously dies. Anna's mother indicated that Anna's grandfather had been taken to the hospital and died about the same time that Anna wrote this story.

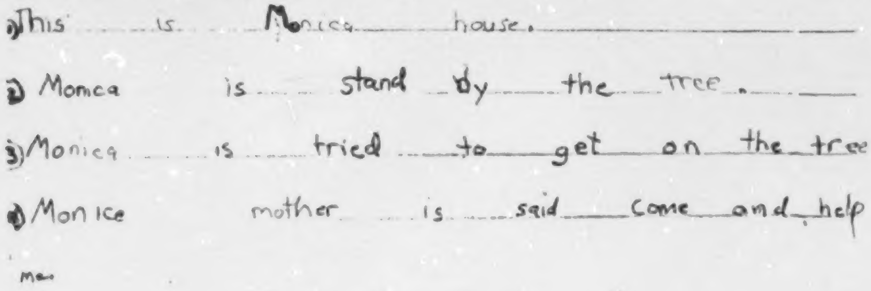
On February 8 Anna wrote a story about a queen who was poisoned when something was added to her food. The topic was fairy tales, but Anna said she got the idea for her story from a salt fight that morning in the cafeteria during breakfast when some students surreptitiously put salt in some other students' food. Putting something in someone's food made its way into Anna's fairy tale.

In Anna's February 25 story about an Indian boy, the main character was given the name Warrior. She indicated that she got the idea for that particular name from the mascot name for the high school, the Baboquivari Warriors.

the description of Year II data. All contexts--situational, linguistic, psychological and socio-cultural--will be combined with the product data to reveal Anna's continuing development as a writer.

The first "chunk" of writing in Year II includes five pieces that Anna wrote in response to either her own drawing or what the teacher called "story starters." Ms. Caldwell uses drawing to begin her writing program by having the children elaborate on what they draw in a warm-up session at the beginning of each school day. The assignment is to draw a picture and then write four sentences about the drawing. Early in Year II Anna chose to spend her time describing what was happening in the picture. The first three pieces we observed all were written on 9/21/82.

Figure VI-19 Anna's Text 9/21/82A



1) This is Monica house.
2) Momca is stand by the tree.
3) Monica is tried to get on the tree
4) Mon ice mother is said Come and help
me

This is Monica's house .
Monica is standing by the tree .
Monica is trying to get on the tree .
Monica's mother is saying , " Come and help me . "

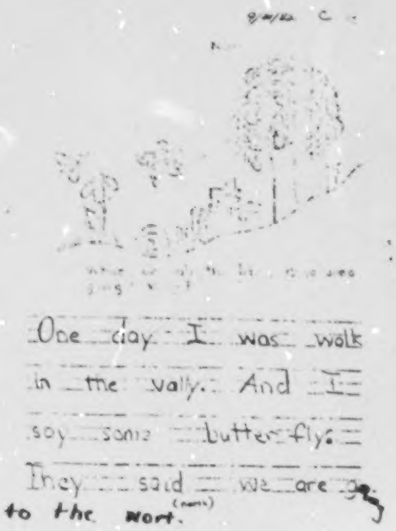
In the first piece Anna makes few revisions as she writes. Instead, she finishes the piece, puts it away and then goes to talk with Ms. Caldwell. When she returns to her seat she pulls the drawing out again, rereads it and makes several corrections, e.g., adds a capital to Monica, changes TRAND to TRIED and finally settles on STAND for STANDING. When she reads the final version to the researcher she reads STANDING for STAND, TRYING for TRIED and SAYING for SAID, illustrating the appropriate morphemes for the words she had invented spellings for. She seems impatient to get the piece finished so that she can do an errand for Ms. Caldwell.

The second piece of the day, 9/21/82, is written in response to one of a number of story starters which Ms. Caldwell has in a coffee can in the middle of a table where writing supplies are located. Selecting a small dittoed picture of a dragon she writes quickly, ONE DAY I GOT A... she stops, writes D-R-A and then erases the whole structure. She stops and talks with a classmate about how to spell DRAGON, consults a dictionary but gets distracted by the pictures and finally gives up and goes to get a drink. Because of the close proximity of their seats and a curriosity about others' work, another student has now gotten involved in the discussion about how to spell DRAGONS, so while Anna gets her drink he looks it up for her. This Tom

Sawyer-like performance aimed at getting help from others is reminiscent of last year's behavior and is characteristic of many children in the room. Since Ms. Caldwell encourages cooperation, what any child produces is often the result of collaboration. The remainder of the piece is written very quickly, and she announces she'll write still another.

The third piece of the day was also written in response to a story starter, this one with a picture of some butterflies and a query about where they might be headed.

Figure VI-20 Anna's Text 9/21/82



One day I was walk
in the vally. And I
soy some butterflys
They said we are going
to the nort. (north)

One day I was walking in the valley.
And I saw some butterflies.
They said, " we are going to the north.

Anna characteristically begins her writing with ONE DAY and she does that here. She writes the first sentence quickly, talking aloud as she writes, ONE DAY IS WAS WALKING IN THE VELLON. She looks carefully at the last word and says "Valley. Is that right? V-a-l-l-e?" She goes to check a resource but can't find it quickly. She asks the same child who helped her with DRAGON for help. He tries to remember how it is written when the T.V. show "The Big Valley," begins. He says he watches it every day after school. They finally settle on VALLY as appropriate. Anna rereads the sentence she has now completed and writes the remaining two sentences quickly, stopping only to add an S on BUTTERFLY.

Figure VI-21 Anna's Text 10/7/82

① The sun is comeing up.
② The clod are comeing down from the East.
③ It is going to rain we are closeing are windeo
④ kim is skored she is said ⑤ She is saying
⑤ rain, rain, go a way come back another day.

The sun is coming up .
The clouds are coming down from the east .
It is going to rain .
We are closing our windows .
Kim is scared .
She is sad .
She is saying , " Rain , rain , go away .
Come back another day . "

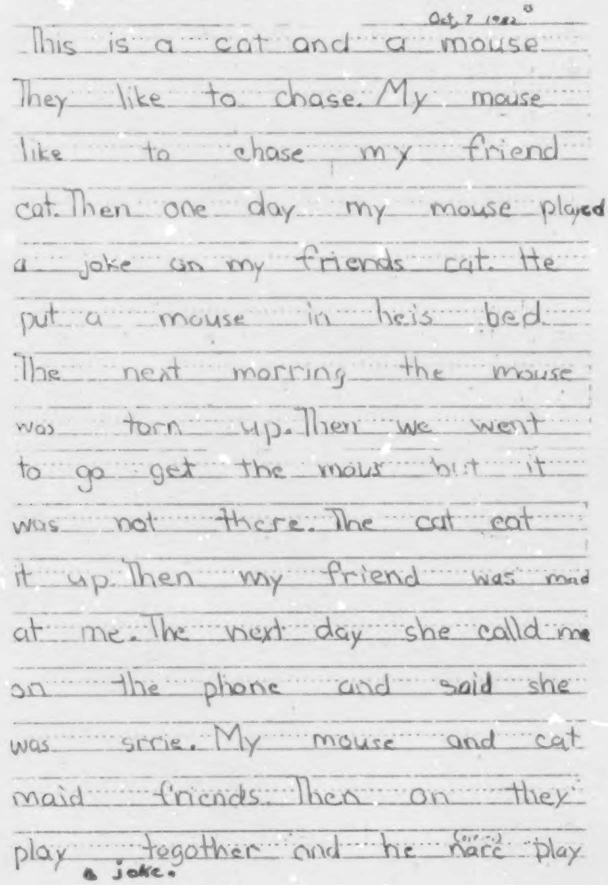
As Anna writes she turns her paper over often to look at her drawing to make sure that her writing accurately reflects her drawing. When she writes THE CLOD (clouds) ARE COMEING DWON (down) FROM THE EAST, the researcher asks her how she knows they are in the east. She says, "Because the sun is in the east."

Anna's level of involvement seems to be much higher on this last piece than it has been on the previous drawing/writing episodes. The researcher records twenty-two behaviors including many local revisions such as punctuation, spelling and handwriting form, as well as rereadings and resource use where on the previous pieces her behaviors numbered only 9, 11 and 8. It isn't clear whether it is the drawing, the writing or some other factors that account for the increased interest, but it is clear that she has more to offer here.

The last piece in this chunk is another written on the same day as the previous one. This one results from a story starter offering two finger puppets to be cut out, taped and colored. After she constructs her puppets she plays with them awhile and then writes the following story.

Anna enjoyed writing this story. Even though she put a lot of energy into editing for form at a local text level (punctuation and spelling), she never lost her delight in the story she was creating. The reader may have some difficulty keeping the characters straight since mice don't usually put other mice in cats' beds, but Anna kept it all straight. The way she explained it was that the puppet mouse put a play mouse in the puppet cat's bed and the puppet cat tore it up. Anna and her friend in the story are real people having spats over their toys. The cat and mouse won't allow real people's problems to interfere with their friendships, and they'll be friends forever.

Figure VI-22 Anna's Text 10/7/82B


Oct. 7 1982 B
This is a cat and a mouse
They like to chase. My mouse
like to chase my friend
cat. Then one day my mouse played
a joke on my friends cat. He
put a mouse in heis bed.
The next morring the mouse
was torn up. Then we went
to go get the mous but it
was not there. The cat eat
it up. Then my friend was mad
at me. The next day she calld me
on the phone and said she
was srrie. My mouse and cat
maid friends. Then on they
play togother and he (never) nare play
a joke.

This is a cat and a mouse .
They like to chase .
My mouse likes to chase my friend's cat .
Then one day my mouse played a joke on my friend's cat .
He put a mouse in his bed .
The next morning the mouse was torn up .
Then we went to go get the mouse
but it was not there .
The cat ate it up .
Then my friend was mad at me .
The next day she called me on the phone and said she was sorry .

My mouse and cat made friends .
Then on they played together
and he never played a joke .

Anna's story language emerges in both this piece and the earlier one written on the same day. Anna read the last sentence of this piece, THE ON THEY PLAYED TOGETHER AND HE NEVER PLAYED A JOKE as ANOTHER JOKE, revealing her awareness of storybook language. She hasn't got it just right yet, but her attempt indicates an awareness of how authors incorporate unique phrasing appropriate for storytelling but not oral language. Her RAIN, RAIN, GO AWAY in the text written earlier suggests that Anna is familiar with this special language and seeks to include it in her own stories.

In summarizing Anna's writing over this first chunk, we see her beginning to get her feet on the ground again after summer vacation. Socially she begins to include her classmates in her writing process, calling on them for help in spelling and ideas for writing. Ms. Caldwell has spent a lot of time discussing the social atmosphere of the room and how important they all are to each other. Her major objective during this early part of the school year has been to help the children learn to work together, to learn to share their work without fear of derision and to help them understand how important they are to each other.

In this atmosphere Anna is learning both involvement in and commitment to her writing. Nearly every day the children in Ms. Caldwell's class share their writing formally with each other. They are encouraged during these sharing periods to ask questions of the writer. They ask for clarification and expansion of ideas, and they get ideas for their own writing from others. This new awareness of reader/listener concerns are evidenced in Anna's revisions and in her comments about how good writing makes sense to a reader. In her first concepts of writing interviews on 10/7/82 she identifies Sharon as a good writer not only because she can spell well but because she writes "long stories that make sense." She also indicates that Sharon and others are always available to read and respond to what she has written.

Even though Anna has learned to do a considerable amount of revising and rewriting during composing, her concepts of writing interview early in Year II, illustrates that she isn't yet comfortable talking about the process. She hasn't yet developed an overt awareness of the planning and revising she does when she writes.

R: When you decide to write what's the first thing you do?
A: Decide what I'm going to write.
R: Okay, and then what do you do?
A: Then I start writing.
R: And then what?
A: And then, and then if I forget what...what I want, maybe I'll read it.
R: And when you want to end your writing what do you do?
A: Um, I try and put, and put, and end it.
R: Like what?
A: Like, um, like what I've got and what I can put in there.
R: ...If you're writing a story and you want to end it, what... how do you do it?
A: I write different stories. I write FINISHED and then if I want to write some more I got through with that one and then I write THE END.

Writing just happens; she isn't yet consciously aware of how.

Anna is aware of several spelling strategies she uses such as sounding out, using the dictionary and asking other people, but learning to spell is still for the most part a mystery to her. She identifies Sharon again as a good speller although she concedes that even Sharon probably makes spelling errors.

R: Do you think Sharon can spell Halloween?
A: Uh-huh (No).
R: Do you think she will be able to spell it in a couple of weeks?
A: Um-huh (Yes).
R: Why?
A: Like when she gets, um, if she only hears Halloween and she'll not know how to spell it, she'll probably get used to it and start spelling it.

Anna's percentage of conventionally spelled words in this chunk of writing ranged from 77:86% with percentage of correct punctuation ranging from 40% in the RAIN, RAIN, GO AWAY piece to 100% in MY DRAGON.

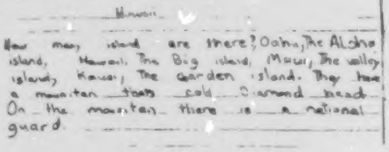
It is important to mention here that all of these five pieces were written in response to some visual stimuli - a drawing or a story starter. Pragmatically Anna's text assumes the reader has a visual reference to the stimuli, which is accurate given how the writing is shared with readers in the classroom. Since the text is never separated from the visual stimuli, there is no need to explain it in detail. This economy principle of saying only what one needs to say and no more is a principle that guides adults' writing as well. Consider how ridiculous it would be to try to make sense of the text of a cartoon without the picture!

Second Chunk: Year II

The second chunk of Anna's Year II data includes a large number of diverse pices of writing that she wrote between October 12 and December 2. They are grouped here to demonstrate the wide variety of text that she worked with over this six-week period.

The first piece HAWAII was written in response to an assignment to read some resource material about Hawaii and to write at least two factual sentences.

Figure VI-23 Anna's Text 10/12/82



Hawaii
How many island are there? Oahu, The Aloha island, Hawaii, The Big island, Maui, The valley island, Kauai, The Garden island. They have a mountan thats cold Diamond head. On the mountan there is a national guard.

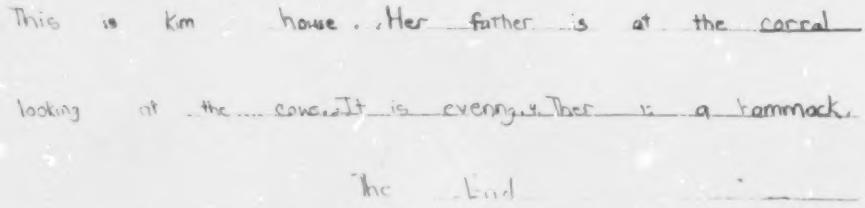
Hawaii
How many islands are there ?
Oahu , the Aloha Island , Hawaii , the Big Island , Maui , the Valley
Island , Kauai , the Garden Island .
They have a mountain that's called Diamond Head .
On the mountain there is a national guard .

Anna struggled with this text. Her first problem was not knowing how to choose which information in the text to write about. The Hawaiian names were unfamiliar and difficult, so the first sentence turned out to be a listing of the islands with a phrase about each. This sentence was copied nearly verbatim from the resource text. Out of all the other information available in the text she chose to write two sentences about Diamond Head. The text included a picture of Diamond Head and its national guard armory.

On the bimonthly interview that included this piece Anna put it at the bottom of her preference list but at the top of Ms. Caldwell's. She said that Ms. Caldwell would like the information she included. The class had made a whole unit of Hawaii.

The second piece in this chunk is another piece about a drawing of a friend's house.

Figure VI-24 Anna's Text 10/19/82


This is Kim house. Her father is at the corral

looking at the cows. It is evenng. Ther is a hammock.

The End

This is Kim's house .
Her father is at the corral looking at the cows .
It is evening .
There is a hammock .
The End

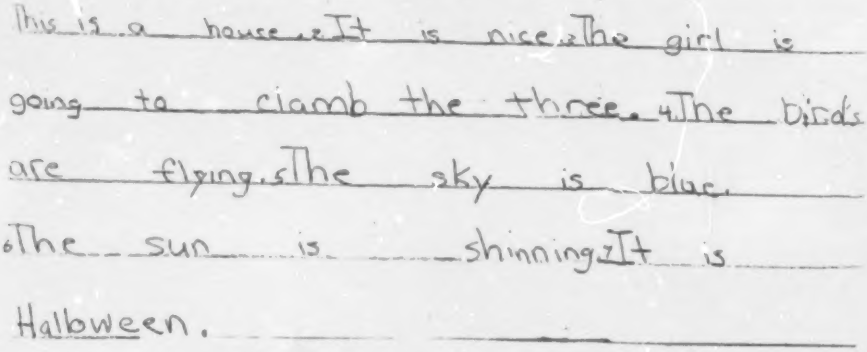
Two interesting things happen during this composing period. First she spends a lot of time on spelling in this piece, unlike most other pieces. She changes KIM'S to KIM even though her original spelling was correct. When the researcher asked her why she made the change, she just shrugged. She also spends an unusual amount of time on spelling other words -- FATHER, CORRAL, EVENING, and HAMMOCK. When she gets irritated with this process, she finally comments that she should "just put the letter I hear."

The second interesting event during composing illustrated Anna's social status. About halfway through the writing period two boys at her table got in a dispute over a stolen picture. Anna stepped in, got both sides of the story, made a decision and settled the dispute with both boys being perfectly happy with the outcome. She immediately went back to her writing, hardly pausing before beginning to write again. It may be that for some children interruptions are not as significant to the writing process as they might appear to be. For Anna, this one hardly counted at all in terms of writing although it does illustrate how socially adept she is.

The third piece in this chunk is another draw/write/share episode. The class is more excited about Halloween than either drawing or writing, and Anna's production is not very interesting from any perspective.

On November 9, Anna writes a piece she likes a lot. This composing episode included fifty-three behaviors: revisions, rereadings, subvocalizing, interruptions, stopping to think, etc. After she finished writing the piece she reread it and made several other local revisions.

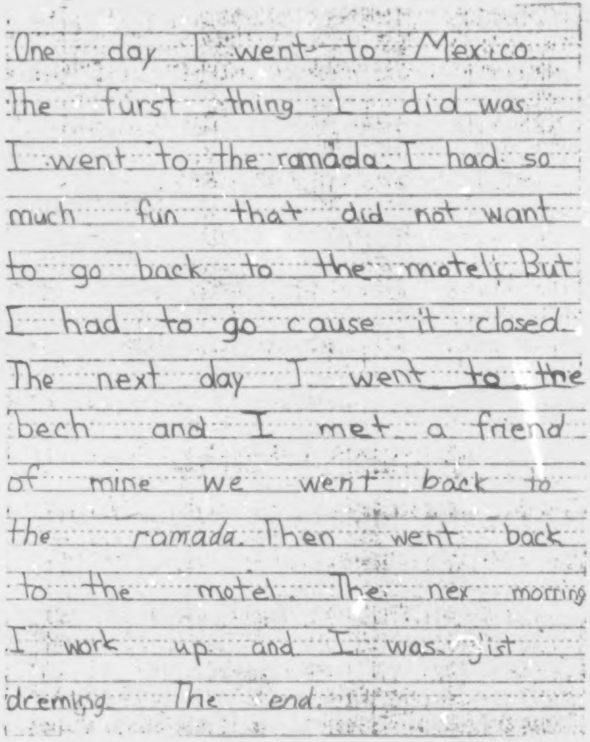
Figure VI-25 Anna's Text 10/26/82



This is a house. 2It is nice 3The girl is going to ciamb the three. 4The birds are flying. 5The sky is blue. 6The sun is shinning 7It is Halloween.

This is a house .
It is nice .
The girl is going to climb the tree .
The birds are flying .
The sky is blue .
The sun is shining .
It is Halloween .

Figure VI-26 Anna's Text 11/09/82



One day I went to Mexico The furst thing I did was I went to the ramada I had so much fun that did not want to go back to the motel. But I had to go cause it closed. The next day I went to the bech and I met a friend of mine we went back to the ramada. Then went back to the motel. The nex morring I work up and I was jist dreming The end.

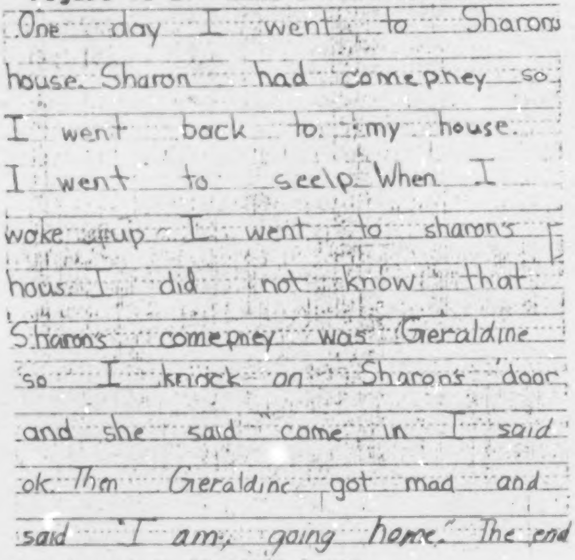
One day I went to Mexico .
The first thing I did was I went to the ramada .
I had so much fun that I did not want to go back to the motel .
But I had to go cause it closed .
The next day I went to the beach
and I met a friend of mine .
We went back to the ramada .
Then I went back to the motel .
The next morning I woke up
and I was just dreaming .
The end .

During this piece Anna talked aloud almost continually as she composed. She wrote ONE DAY I WENT.. and then stopped to say, WHERE DID I GO? She talks to others around her. WHERE AM I GOING? No one pays much attention. They're all doing their own work. Finally, she says, MEXICO! When she came to the word RAMADA she had to make a decision about whether to use a hard unfamiliar word or change it to an easier, more familiar one. She can't think of another word that will fit so she tries the hard one. Her first attempt is RMIYDI which she knows is wrong. She discusses it with the researcher who doesn't give her an answer and finally ends up with RAMADA, mostly through syllable/sound strategies.

One strategy that Anna carried over from the year before is trying out various spellings on a scratch piece of paper before she includes it in her text. She uses this strategy with CAUSE for BECAUSE. She knows there's something wrong with the word, but she can't figure out what it is. Anna says she like this piece because of the surprise ending. She calls the ending A JOKE and laughs every time she reads it. The class gives her all sorts of praise when she reads it aloud to them. They like the ending, too.

The piece Anna wrote on 11/16/82 represents still another different kind of text from the others written during the period. The assignment is creative writing on any topic, which Anna usually responds well to. But today she just can't get started. She chats with others at the table, reads from a copy of The Guinness Book of World Records, folds paper she'll need for work in another center, chats again, all for nearly fifteen minutes before she begins to write. Even then she has difficulty drumming up a topic for writing. She begins in her usual way. ONE DAY I WENT... she interrupts to tell the researcher about surprises that Ms. Caldwell has given the class and to ask Sharon how to spell her name. She finishes the sentence, TO SHARON'S HOUSE. She stops again to listen to conversation at the next table. Throughout the piece she maintains the same level of apparent involvement, stopping frequently to chat with classmates about several topics seemingly unrealted to her topic. The interesting point is that the finished product does not provide any evidence of lack of interest. In fact, no index of comparison - syntactic, mechanic or semantic -- reveals Anna's noninvolvement in creating this text. In spite of all the interruptions, ten lengthy ones, she manages to maintain a sense of story and to write syntactic structures that compare in complexity to others she writes during the year and keep levels of conventional spelling and punctuation within her own norm. The key to how that may be possible may be in her rereadings, either silent or subvocalized, and in her revisions. Anna appears to use each interruption as a time to reread and/or revise her text. At one point when the class is interrupted by a knock at the door, Anna includes the knock in her text, SO I KNOCK (knocked) ON SHARON'S DOOR AND SHE SAID COME IN. It may be that she can incorporate these interruptions in her text because the topic is such a familiar one. Ms. Caldwell commented that children often write about these friendship quarrels and resolutions in the texts they produce during free writing time.

Figure VI-27 Anne's Text 11/16/82

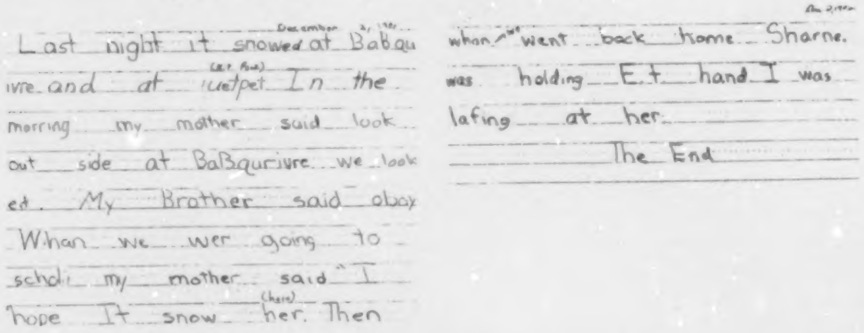


One day I went to Sharons
house. Sharon had comepney so
I went back to my house.
I went to seelp When I
woke up I went to sharon's
hous. I did not know that
Sharon's comepney was Geraldine
so I knock on Sharon's door
and she said "come in I said
ok. Then Geraldine got mad and
said "I am going home." The end

One day I went to Sharon's house .
Sharon had company
so I went back to my house .
I went to sleep .
When I woke up I went to Sharon's house .
I did not know that Sharon's company was Geraldine
so I knocked on Sharon's door
and she said , " Come in . "
I said , " O.K. . "
Then Geraldine got mad and said , " I am going home . "
The end

The sixth piece in this chunk, 12/2/82, is written about a snowfall in the desert, an extraordinary event.

Figure VI-28 Anna's Text 12/2/82



December 2, 1982
Last night it snowed at BaBqu
ivre and at Kietpet In the
(Kitt Peak)
morring my mother said look
out side at BaBqurivre we look
ed. My Brother said obay
Whan we wer going to
schol my mother said "I
hope It snow her. Then
(there)
whan we went back home Sharne.
was holding E.t hand I was
lafing at her.
The End

Last night it snowed at Baboquivari and at Kitt Peak .
In the morning my mother said , " Look outside at Baboquivari . "
We looked .
My brother said , " O boy ! "
When we were going to school my mother said , " I hope it snows here . "
Then when we went back home Sharon was holding E.T.'s hand .
I was laughing at her .
The End

The last part about Sharon holding E.T.'s hand looks incongruent with the rest of the text, and of course it is. But it is interesting to see how that part came to be. Anna's composing continues almost without interruption to ...MY MOTHER SAID "I HOPE IT SNOWS HERE." At that point she interrupts her writing to tell the researcher about a Christmas party the group is planning. Mark, another students across the table, begins to talk mostly to himself but aloud about Christmas and about E.T. She listens to him for awhile and then chats with him about E.T. At that point she resumes her composing, without rereading, and adds the last sentence. It seems that even Anna has a threshold at which point interruptions interfere with the acceptability of the written product. In her bimonthly interview that included this piece she ranked it last of all the pieces she had written during this time, "because it had a dumb ending." She seemed to be embarrassed that she had included the part about E.T. holding Sharon's hand.

The last piece, written on the same day as the one above, illustrates Anna's first attempt at global or text level revision. Every behavior the researcher observed was either a rereading or a revision. She writes the first sentence YESTERDAY I WENT TO THE STORE, and then writes THEN I WENT BACK TO MY HOUSE. She stops to reread the two sentences, pauses, frowns, and then adds a sentence between the two, THEN I BOUGHT SOME PAPER AND A PRESTER (present). The remainder of the revisions are on the local level.

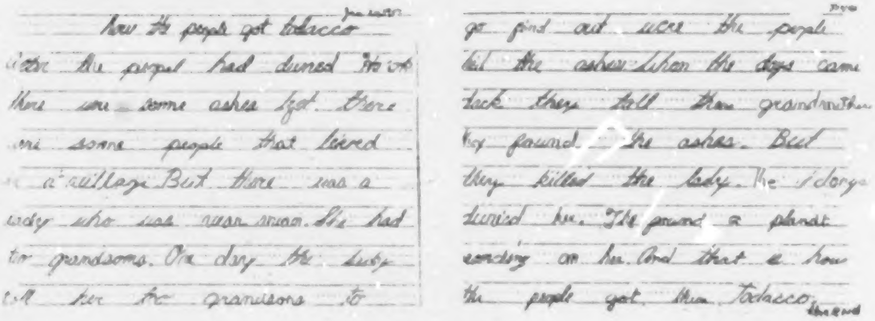
As we review this chunk of Anna's writing we find several interesting points emerging. It is clear that she is attempting a variety of texts, factual, descriptive and narrative. She is also becoming more adept at getting her personality into her writing. The piece about Mexico was one of her favorites because it had a twist at the end. She has used this strategy before and enjoys watching her reader's response. She is beginning to explore her social relations in her writing. The piece about the spat with Geraldine who wanted Sharon all to herself appers to be a realistic picture of friends having their problems. She also indicated in her bi-monthly interview that she felt only two pieces were really good, the Mexico piece and the cat and mouse piece from the previous set. She said they were best because "I was joking on these -- there's jokes." On the contrary she didn't like any of the pieces she wrote about her drawings. When the researcher tried to get her to say why, she just shrugged and sighed. At this point she is either unable or unwilling to discuss the particulars of her writing.

Third Chunk: Year II

The next chunk of Anna's writing covers those pieces written from January through March. The Christmas vacation for the University of Arizona was about a month long and with the semester exam period in early December and the school activities related to preparations for the holidays Anna was not observed for over six weeks.

The first piece in the new semester was written on January 20. It turned out to be a very complicated venture which produced one of Anna's favorite pieces of text.

Figure VI-29 Anna's Text 1/20/83



how the people got tobacco

After the perpel had dured Ho'ok
there were some ashes left. There
were some people that lived
in a village But there was a
lady who was very mean. She had
two grandsons. One day the lady
tell her two grandsons to
go find out were the people
hid the ashes. When the boys came
back they tell there grandmother
they found the ashes. But
they killed the lady. The boys
buried her. The found a plant
growing on her. And that is how
the people got there Tobacco. the end

```
How the People Got Tobacco
After the people had burned Ho'ok there were some ashes left .
There were some people that lived in a village .
But there was a lady who was very mean .
She had two grandsons .
One day the lady told her two grandsons to go find out where the
   people hid the ashes .
When the boys came back they told their grandmother they found the
   ashes .
But they killed the lady .
The boys buried her .
They found a plant growing on her .
And that is how the people got their tobacco .
the end
```

The class had been reading Papago legends and Anna came across one called HOW THE PEOPLE GOT TOBACCO. She found it very interesting and decided to retell it in her creative writing for the day. Anna usually prefers writing in manuscript, but she decides to write this piece in cursive which makes the writing process much slower and more labored than usual. She chooses to rewrite many letters over and over because their form doesn't meet her standard. Twice she inadvertantly prints a word. When that occurs she looks up at the researcher, points to the printed word and laughs but does not make a change.

Anna subvocalizes during the whole piece. The story is a complicated one, and she struggles to keep the events in their correct order and to tell only what she needs to. The researcher asked about

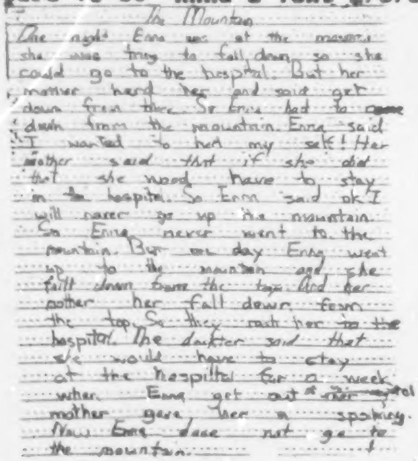
Ho'ok and Anna retells an earlier part of the story that identifies Ho'ok as a wicked witch. She chooses not to include any of that information in her writing, however.

In its first version this piece ends with WHEN THE BOYS CAME BACK THEY TOLD THEIR GRANDMOTHER THEY FOUND THE ASHES. When she reads the piece aloud, the researcher asks if the ashes were the tobacco. Anna says, "Uh-oh, I don't understand." She goes back to the legend, rereads the whole story and decides she needs to add more to her piece. She writes the remaining four sentences and announces, "There!"

Anna is very pleased with this piece. In her bi-monthly interview that included this story she put it at the top of both lists, hers and Ms. Caldwell's. She comments that she liked this story best because it was an interesting, complicated legend and she was pleased with her retelling of it.

The next piece, THE MOUNTAIN, is one of Anna's most sophisticated pieces of writing syntactially. It contains 9.3 words per T-unit.

Figure VI-30 Anna's Text 2/3/83

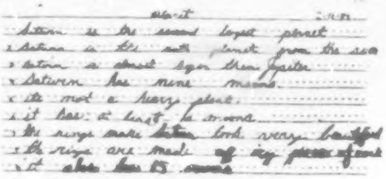


The Mountain
One night Enna was at the mountain .
She was trying to fall down so she could go to the hospital .
But her mother heard her and said , " Get down from there . "
So Enna had to come down from the mountain .
Enna said , " I wanted to hurt myself ! "
Her mother said that if she did that she would have to stay in the hospital .
So Enna said , " Ok ,
I will never go up the mountain . "
So Enna never went to the mountain .
But one day Enna went up to the mountain
and she fell down from the top .
And her mother heard her fall down from the top .
So they rushed her to the hospital .
The doctor said that she would have to stay at the hospital for a week .
When Enna got out of the hospital her mother gave her a spanking .
Now Enna does not go to the mountain .

Even though the story was produced nearly without pausing, it turns out to be very complex. In the first few sentences she uses adverbial phrases, prepositional phrases, embedded nominal clauses, an illative (inferential) connector that introduces an embedded adverbial clause, a disjunctive inter-T-unit connector, conjoined verbs, and dialogue. Semantically the piece includes several relatively complex ideas--a child who wants to hurt herself so she can go to the hospital, a protective yet angry mother, and appropriate punishement for the child who disobeys. It isn't always clear what motives direct the actions of characters, but it is clear that for the most part Anna tells a complicated story very well. She rates this piece second on her list of preference and laughs at the ending, even though she won't say why. Perhaps she's enjoying the writer's prerogative to deal with miscreants any way she pleases.

On February 17 Anna's writing performance is radically different from that of just two weeks earlier.

Figure VI-31 Anna's Text 2/17/83



Planet
1.
Saturn is the second largest planet .
2.
Saturn is the sixth planet from the sun .
3.
Saturn is almost bigger than Jupiter .
4.
Saturn has nine moons .
5.
It's not a heavy planet .
6.
It has at least 10 moons .
7.
The rings make Saturn look very beautiful .
8
The rings are made of icy pieces of rock .
9.
It also has 15 moons .

This piece is expository, unlike the more familiar narrative Anna usually writes. The sentences are fairly short, 6.3 words per T-unit, with the text as a whole largely disconnected and the sentences actually numbered. This new format for writing had come about as the result of one child's request for the teacher to help him find something to write about. She suggested he try factual writing so he wrote a report on a paricular breed of dog he was interested in. When he shared his writing with the class everyone wanted to do reports. Anna chose to do hers about the planet Saturn.

It is interesting to note that even though this text is much shorter than the one before it, the number of writing behaviors observed during the composing episode jump from 21 to 42. She begins with consulting resource material, a World Book encyclopedia, writes the first line, begins the second line with the word SPACE and then revises it to SATURN. At this point, she rereads the last sentence, looks back at the encyclopedia, interrupts to ask a classmate for a piece of paper, stops to think a minute or two and then makes a comment to the researcher about not knowing what to do next. The two of them talk about the options available and Anna decides to read through the whole article once and then decide what to add next. She stops to talk to others at her table, goes back to the encyclopedia and gets distracted by an article on snakes. The text of the encyclopedia is difficult for her. She finally gives up on this resource and gets another. It is even more difficult so she puts it away and gets a book about space from another student. She finds a sentence she wants to include in her text and begins to copy it. The remainder of the composing episode continues in the same vein.

During this interchange of moving from one resource to another and still another, an interesting event occurs. Anna notices that three different sources calculate Saturn's moons differently. At first, she clings to the first source as the correct one, but when the researcher asks her why, she can't explain her reasoning. Then when she finds the third source that says Saturn has fifteen moons, she decides it must be right because "it has the most." She tries to get her teacher's attention so she can ask about the moons but Ms. Caldwell is busy. The question is left unresolved.

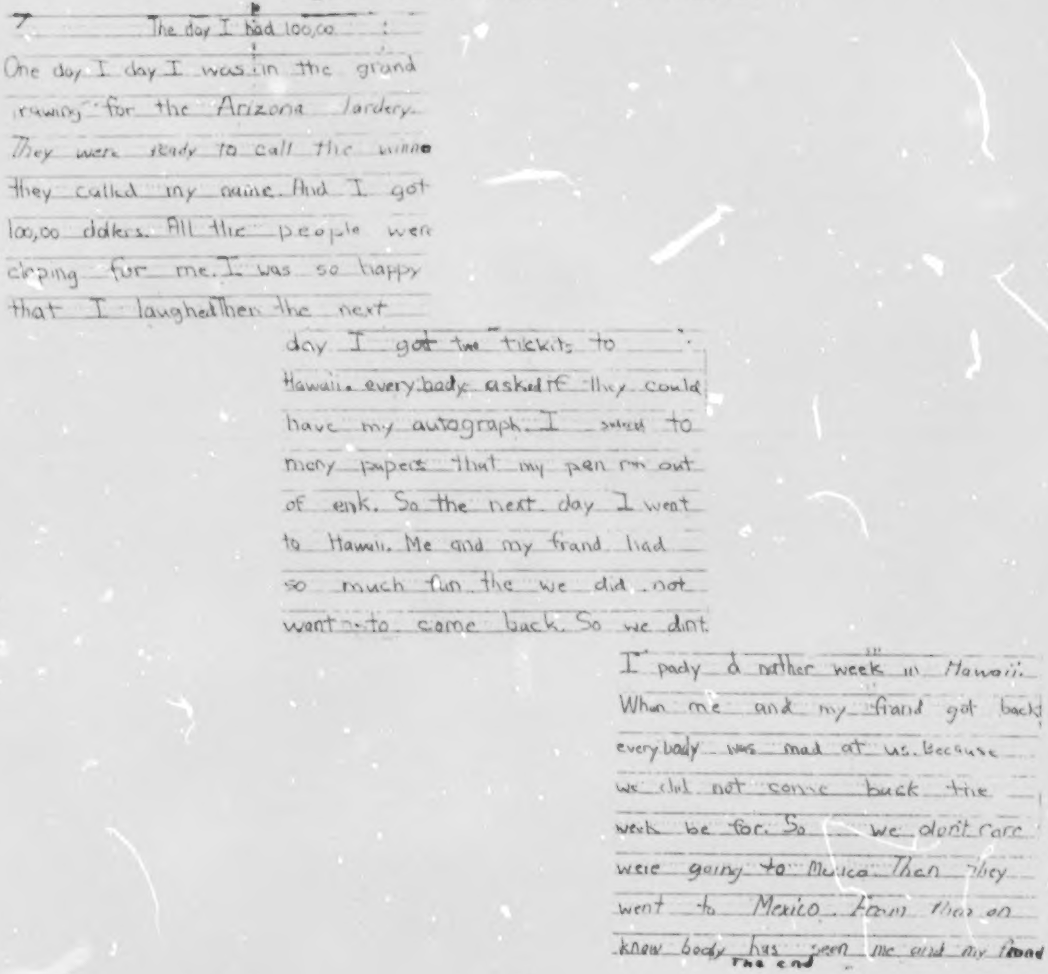
On March 10 Anna writes a story about E.T. During this week the children were making books of their own writing to share with their classmates and children in other classes. Many of the books represented a combination of Papago culture with a more standard mainstream American culture such as THE DAY E.T. WAS EE'TOI (a Papago holy man) and THE DAY HO'OK FELL IN LOVE WITH E.T. Anna's E.T. piece pictures the little alien disobeying his mother and going to a dance. Even E.T. gets punished when he does wrong and learns not to do it again.

The last piece in this chunk is another one of Anna's fantasies that appears to have a grounding in real life, like THE MOUNTAIN and GOING TO SHARON'S HOUSE. In this dream-like story Anna wins $1000,000 in the Arizona lottery.

This story represents how efficiently Anna can tie the varied parts of a text together at the same time as she makes up these fictional events. Anna has had really very little experience with the lottery. She has watched her mother buy tickets occasionally and even win small amounts like $2 or $5. She may even have seen the grand drawing on T.V., but for the most part the fantasy is her creation. She weaves the events together with excitement and suspense. THEY WERE READY TO CALL THE WINNER. THEY CALLED MY NAME. AND I GOT $100,000. The reader can almost hear the crowd applauding and cheering. The good cheer doesn't end here, however; she buys two tickets to Hawaii and signs autographs until her pen runs out of ink.

It is interesting to note the connectors that Anna uses to relate the events of her story. Up to this point her strategy has been mainly to conjoin ideas with AND, thereby indicating that most events were of equal value. In this piece, Anna uses not only time markers to join events but causality markers as well. SO THE NEXT DAY I WENT TO HAWAII. ...WE DID NOT WANT TO COME BACK. SO WE DIDN'T...EVERYBODY WAS MAD AT US BECAUSE WE DID NOT COME BACK THE WEEK BEFORE. She misuses some connectors, however. She writes SO WE DON'T CARE when she really means BUT WE DON'T CARE. Her miscue on the pronoun THEY in the next line is interesting. She may have been attempting one of her twists at the end. Is the dream really about herself or could it be about someone else? If she's working toward a surprise ending she can't quite pull it off. The ending she settles on, FROM THEN ON...does achieve storyness, though.

Figure VI-32 Anna's Text 3/24/83



The day I had 100,00
One day I day I was in the grand
rawing for the Arizona lardery.
They were ready to call the winne
they called my name. And I got
100,00 dolers. All the people wer
cleping for me. I was so happy
that I laughedThen the next
day I ~~got~~ two tickits to
Hawaii. every body asked if they could
have my autograph. I sined to
meny papers that my pen ran out
of enk. So the next day I went
to Hawaii. Me and my frand had
so much fun the we did not
want to come back. So we dint.
I pady a nather week in Hawaii.
When me and my frand got back
every body was mad at us. because
we did not come back the
week be for. So we dont care
were going to Mexico Then they
went to Mexico. Fom than on
know body has seen me and my frand
The end

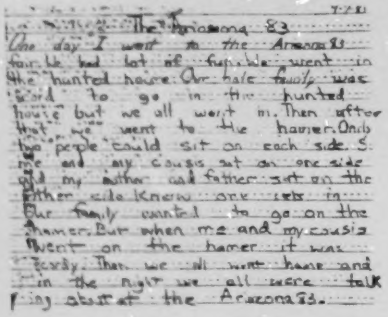
The Day I Had $100,000
One day I was in the grand drawing for the Arizona Lottery
.
They were ready to call the winner .
They called my name .
And I got 100,000 dollars .
All the people were clapping for me .
I was so happy that I laughed .
Then the next day I got two tickets to Hawaii .
Everybody asked if they could have my autograph .
I signed too many papers that my pen ran out of ink .
So the next day I went to Hawaii .
Me and my friend had so much fun that we did not want to come back
.
So we didn't .
I paid another week in Hawaii .
When me and my friend got back everybody was mad at us because
we did not come back the week before .
So we didn't care .
We were going to Mexico .
Then we went to Mexico .
From then on nobody has seen me and my friend .
The End

The summary data for Year II presented after this section make it evident that she has grown in all areas--syntax, orthographics, semantics and pragmatics--during the second half of Year II. Her stories are generally longer, more complex semantically and more sophisticated syntactically. There are some exceptions, as we have noted, but for the most part Anna's written product demonstrates a greater control over most written tasks. Her process data reveals more revisions and rereadings, often occurring together, and a sophisticated use of many resources. Even though her composing process is often interrupted by various events, she seems not to be distracted much unless she's struggling with a topic of little interest or a form that is new and difficult.

Fourth Chunk: Year II

This last chunk of four pieces Anna wrote in April and May illustrate all of those points.

Figure VI-33 Anna's Text 4/7/83

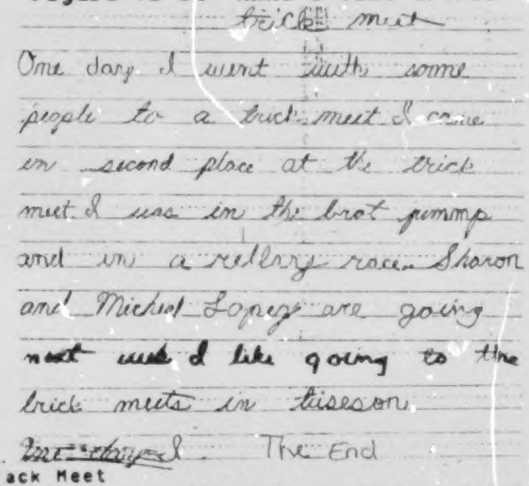


The Arizona 83
One day I went to the Arizona 83 fair .
we had lots of fun .
we went in the haunted house .
Our whole family was scared to go in the haunted house .
But we all went in .
Then after that we went to the hammer .
Only two people could sit on each side .
So me and my cousin sat on one side
and my mother and father sat on the other side .
No one else in our family wanted to go on the hammer .
But when me and my cousin went on the hammer it was scary .
Then we all went home
and in the night we all were talking about things at the Arizona 83 .

This piece on the Arizona state fair has 8.84 words per T-unit, 86% conventional spelling (even though she has consistent trouble with ARIZONA) and includes a total of 115 words. Her invented spellings indicate her knowledge of phoneme/grapheme correspondence (HOLE FAMILY, ONLY TWO PEOPLE, KNOW ONE ELSE), and she demonstrates complete control over capitalization. Her last sentence may contain an error (Is AT acceptable there?), but again her awareness of story language is evident.

Her next piece, TRACK MEET, was a struggle for her to write. This was her second piece for the day and she had difficulty choosing a topic. Her product showed it.

Figure VI-34 Anna's Text 4/7/83



trick meet
One day I went with some
people to a trick meet I came
in second place at the trick
meet I was in the brot jummp
and in a rellry race Sharon
and Michiel Lopez are going
next week I like going to the
trick meets in tuseson
~~[illegible]~~ The End

Track Meet
One day I went with some people to a track meet .
I came in second place at the track meet .
I was in the broad jump and in a relay race .
Sharon and Michael Lopez are going next week .
I like going to the track meets in Tucson .

Even with a fairly low level of involvement, she still produced 9.6 words per T-unit, 84% conventional spelling and 80% conventional punctuation. It is important to note that this piece was written in cursive, which is difficult for her.

The next piece, TUCSON, is the longest and most sophisticated piece Anna writes over the two years of the study. It recalls probably one of the most exciting experiences of Anna's school year. The day before she wrote the piece, two of the researchers who had worked on the writing project all year picked up Anna and the other children in the study and brought them to Tucson for an overnight visit to the campus and to their homes for all sorts of festivities. The next morning they were delivered safely (and sleepily) back to their classrooms.

Anna could hardly wait to write her story. She sat down quickly, got her writing materials together and wrote this account of her venture.

Figure VI-35 Anna's Text 4/14/83

Tucson
One day I went to Tucson to stay with some people .
we went to the Planetarium and then to the museum of Arizona .
Then we went to the arcade .
we had lots of fun .
After that we went to Miss Vaughan's house to put our clothes and
sleeping bags away .
Then we went to Miss Kasten's house to have the cookout .
Michael and Gabriel and Virgil and Dwayne were swimming already .

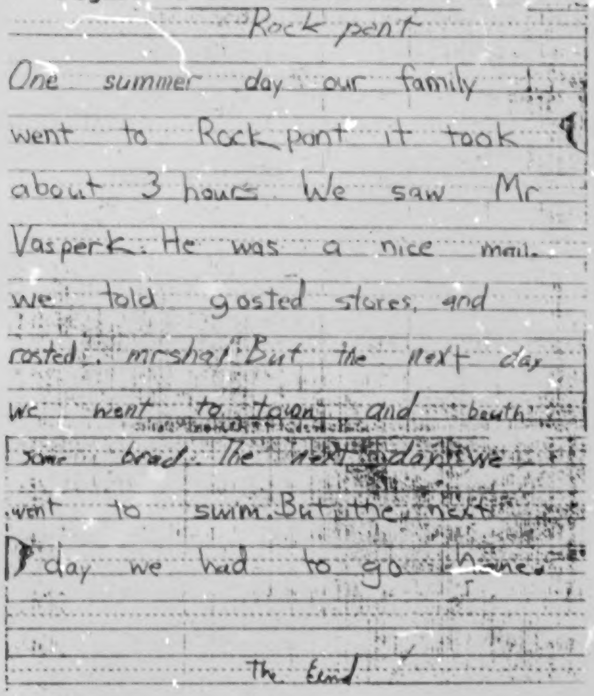
After Michael was cooking the hot dogs .
Then we ate .
After that we had ice cream for dessert .
Then me and Miss Vaughan and Enna and Ruth went to the Tucson Mall .
we went on the escalator and looked at the records and clothes
and Miss Vaughan bought herself something .
Then we went to the YMCA to swim .
we stopped swimming at 9:00 .
Then we went back to Miss Vaughan's house and had cereal with bananas
.
Then we watched a little t.v. and then went to bed .
In the morning we got ready and had cereal with bananas and strawberries
and milk and donuts .
we went to go pick up those Michael , Gabriel , Virgil , Dwayne and Miss
Kasten .
We met them at the University
and then we came to school .
The End

Anna doesn't choose words that are easy to spell or avoid difficult ones. She invents PLANETARIUM, MUSEUM, ARCADE and difficult names like VAUGHAN, KASTEN, MICHAEL, GABRIEL, VIRGIL and DWAYNE. She keeps all the events in their correct order and even rembers what she had to eat.

This composing activity was a delight to observe. She stops only occasionally to confirm a detail with the researcher. She is driven by her message and the need to communicate it with the others in her room. It seemed that telling it was almost as much fun as being there, a fun that was not daunted by necessary revisions and rereadings.

The last piece we observed, 4/28/83, was written in the midst of preparations for an awards banquet and summer vacation. Ms. Caldwell was out of the room for a meeting and her usual steady influence was absent. Anna had difficulty choosing a topic and finally settled on a recent trip to Rocky Point in Mexico.

Figure VI-36 Anna's Text 4/28/83



Rock pont

One summer day our family
went to Rock pont it took
about 3 hours. We saw Mr
Vasperk. He was a nice man.
we told gosted stores. and
rosted mrshal. But the next day
we went to town and beuth
some brad. The next day we
went to swim. But the next
day we had to go home.

The End

Rocky Point
One summer day our family went to Rocky Point .
It took about 3 hours .
We saw Mr. Vosoerg .
He was a nice man .
We told ghost stories and roasted marshmallows .
But the next day we went to town and bought some bread .
The next day we went to swim .
But the next day we had to go home . The End

One interesting composing event occurred. A child across the table read Anna's story after it was finished and actually went to the trouble of looking up the word BOUGHT in the dictionary for her since they both knew it was mispelled but neither knew how to correct the error. Typically for Anna, though, she decided not to change it. She tells her classmate, "This time it doesn't matter."

Table VI-7 Words per Story: Anna Year II

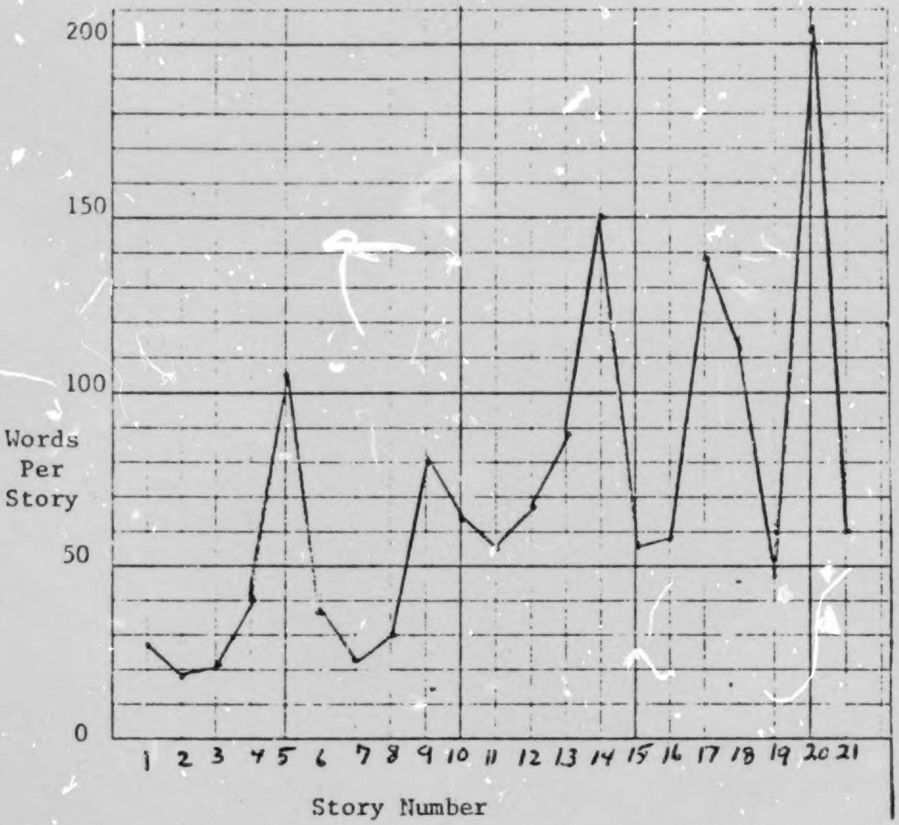


Table VI-8 Words per T-Unit: Anna Year II

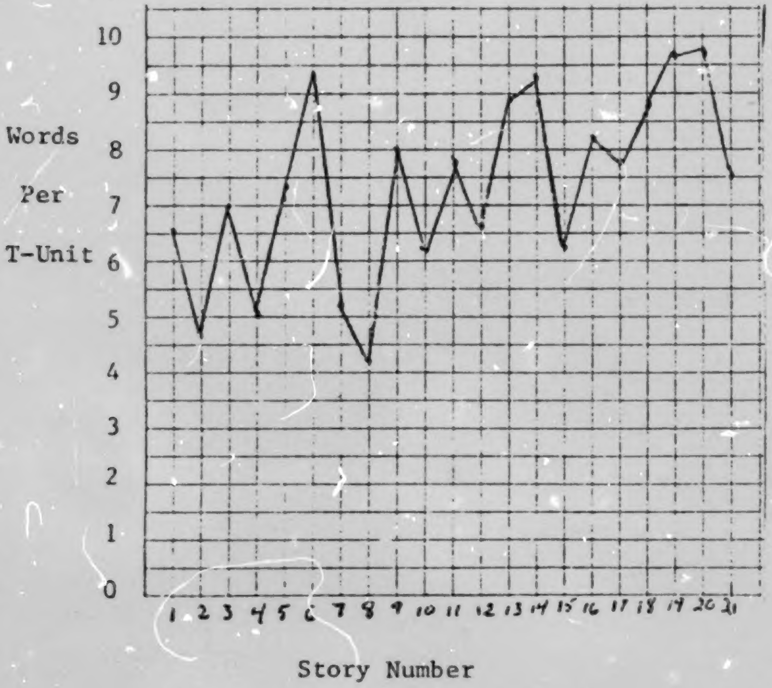


Table VI-9 Clauses per T-Unit: Anna Year II

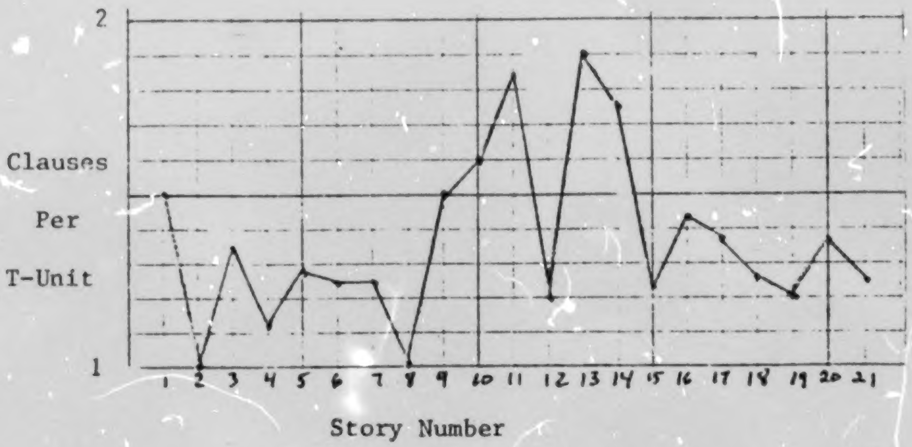


Table VI-10 Syntactic Development: Anna Year II

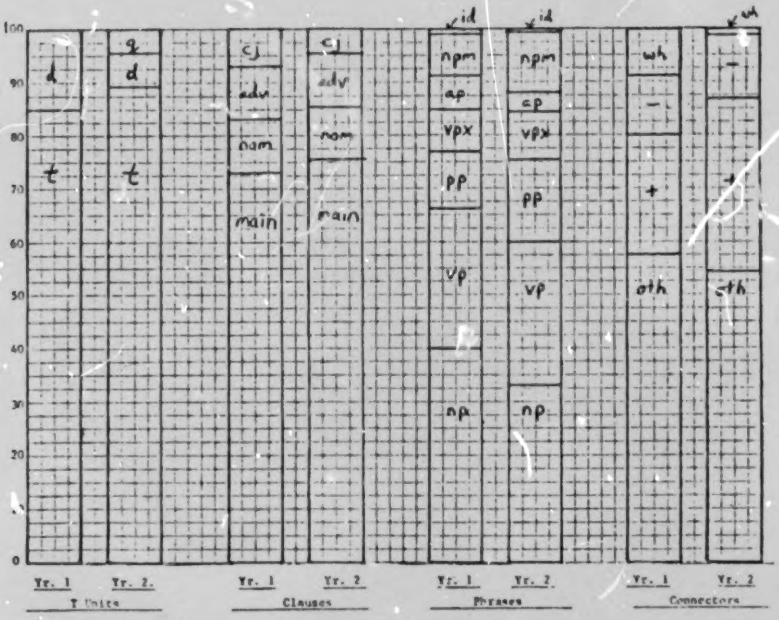
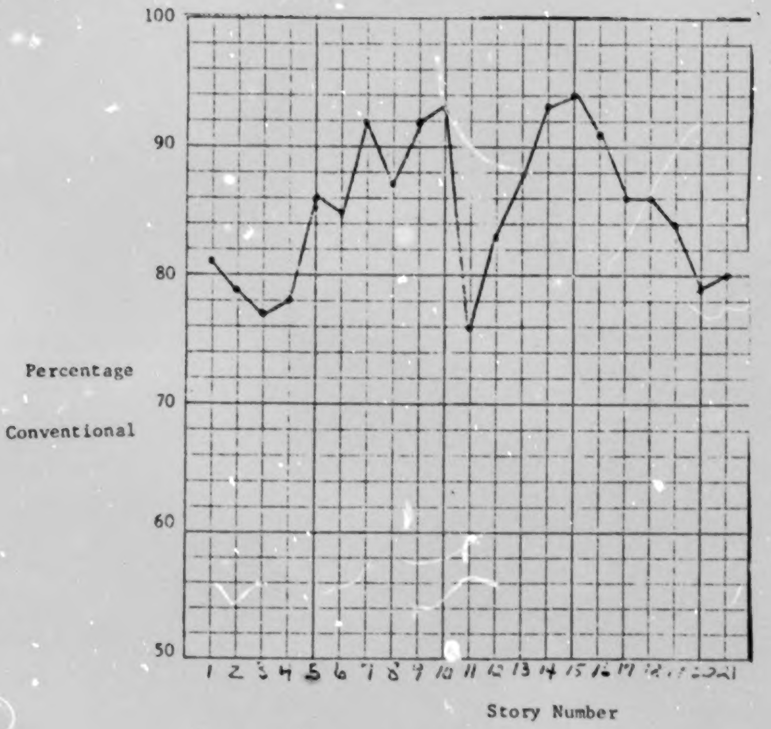


Table VI-11 Percent Conventional Spelling: Anna Year II



Development of Linguistic Systems: Year II

The same four emphases - syntax, orthographics, semantics and pragmatics - that served as the framework for summarizing development across Year I will also frame the summary of Year II.

Syntax

For the purposes of comparing Anna's syntactic development across the two years of the study the same indices used in the summary of Year I will also be applied to Year II.

Beginning once again with words per story, Table VI-7 reveals the same saltatory developmental pattern in Year II as evidenced in Year I. The composing in context section has illustrated the composite reasons for that evident pattern. The information suggests that across the two years, Anna's story length increases overall, particularly during the second half of Year II. As pointed out earlier, this pattern is disguised when the figures are combined or collapsed into means, eliminating much valuable information. For that reason a consistent effort has been made to represent a visual picture of Anna's developmental change across composing episodes, with possible explanations for that change arising out of the composing in context information.

In the area of words per T-unit, Table VI-8 demonstrates that although the pattern is somewhat more stable and reflects a movement toward an increase overall, the uneven pattern identified in Year I remains. Much fluctuation occurs across stories.

Clauses per T-unit, the most traditional index of syntactic maturity, is not particularly enlightening either, as evidenced in Table VI-9. When the stories from Year II are divided in half and the second half compared to the first, some increase is evident. An average of 1.3 clauses per T-unit occurs in the first half and 1.4 clauses per T-unit in the second. That increase is minimal, however. Again, the greatest insights concerning Anna's sentence structure and its maturity come when the composing in context information is considered for each writing episode.

Table VI-10 illustrates the types of T-units, clauses, phrases and connectors Anna uses in Year II and compares them with those of Year I. In the T-unit category dialogue occurs less often in Year II than in Year I, while the percentage of unspecified T-unit types increases. While not represented in this graph, headings occur three times as often in Year II as in Year I. Both mazes and questions also occur less frequently in Year II. Possible explanation for these occurrences are to be found when all elements of composing - personal, task and strategy - are seen in synergistic interaction within each episode.

In the clause category, an increase occurs in the percentage of conjoined clauses, while nominals and adverbials remain stable. Perhaps this change reflects an attempt to handle more ideas simultaneously than in Year I, an indication of cognitive as well as linguistic development.

On the phrase level the graph illustrates that Anna's syntactic change over the two years has occurred mostly on this level. She has begun in Year II to add more modification to basic noun and verb phrases by providing adjectives within noun phrases and by increasing the number of prepositional phrases which serve primarily as adverbials. While percentages of connector types change somewhat from Year I to Year II, that change is not significant in any area.

It seems then, that syntactically the most significant change in Anna's written product across the two years occurs at the phrase level as she begins to increase the complexity of her sentence structure by embedding within both nominal and adverbial phrases. It is also suggested that most aspects of syntax, as evidenced by words per story and words and clauses per T-unit, appear to be influenced more by contextual factors operating during the composing episode than by some overall evidence of competence.

Orthography

The summary of Anna's Year II orghographic data will include information relative to spelling, punctuation, capitalization and letter formation.

Spelling

Table VI-11 shows Anna's percentage of conventional spelling. The same uneven pattern which has grown so familiar is evidenced here again. In this classroom, Ms. Caldwell occasionally allotted some time for spelling instruction. Generally that instruction involved providing the class with a list of words from a speller early in the week and testing their mastery of those words later in the week. In this class, as well in Ms. Howard's, many different types of resources were provided for children's use during composing. Anna used many of those resources during any given composing episode with some types taking precedence over others depending on what words needed to be spelled, who she sat with, her particular mood and inclination of the day and what other classmates were doing.

When Anna's Year II spelling patterns are more closely examined, several interesting features arise. Only ten words are spelled unconventionally more than twice. Of those ten, five are spelled the same way every time and are only used in one story. ARIOZONA for Arizona, FRAND for FRIEND, HAMER for hammer, MICHEAL for Michael and TRICK for TRACK. Of the remaining five, the word WHEN was spelled the same way every time, WHAN, but it was found in three stories, two in

December and one in March.

The remaining words reveal interesting attempts to work toward a conventional spelling. Never moves from NARE in October to NAVER in February even though she spells it conventionally in the same story. Apparently this spelling remains unstable since she goes back to NAVER in March. Morning becomes MORRING in October, November and December but then changes to MORING in April. PLAYED only appears three times during Year II, and three in the same story in October, the cat and mouse story. First Anna spells it PLAYD and then in the last sentence she tries an unusual story-like structure that gives her trouble. The story had been written in the past tense but she wrote the last sentence as "Then on they PLAY together and he never PLAY a joke." Anna read the verbs in the past tense when she read the text aloud to the researcher.

One other word, THEIR, was spelled conventionally three times, as THER in a story in December and as THERE twice in the same story in January.

Few of Anna's unconventional spellings are difficult to interpret given theory from Read and Ferreiro and Teberosky. ESKLADER for escalator, FAILL for fell, GOST for ghost, HERT for hurt are all easily accounted for. Some are more difficult to explain: UETPET for Kitt Peak, SCORDY for scary, (Maybe scaredy-cat?) or UNISTE for university. In the final analysis it is clear that Anna's problems with spelling are minimal and indicate active attempts to apply hypotheses about how to represent in written text words that are familiar orally. For those words she uses most often, conventional spelling is the rule.

Punctuation

As in Year I, Anna's performance in supplying conventional punctuation is dependent on the type of punctuation required by each story. She demonstrates more success in some areas than in others. She has most control over questions marks and periods, 100% and 87.1% respectively, with less control over commas (33.3%) and quotation marks (19.2%). All of these percentages show growth over Year I.

Capitalization

Unlike her performance in Year I Anna does produce some capitalization errors in the middle of words, all proper nouns - ALoha, BaBaqueure (Babaquivari), and vetpet (Kitt Peak). All other problems involved proper nouns or headings except "I hope It snows..." which may have involved capitalizing the second instance of an initial letter the next time it appears in the sentence even though it was inappropriate to do so.

Letter Formation

The same two problems of letter formation that characterized Anna's Year I written product can still serve to represent Year II's letter reversal and cursive handwriting problems. In the area of reversals, Anna reversed B's and D's a total of 12 times out of 213 instances of those letters produced or 5.6%, not much of a problem. In Year II her B/D reversals total 11 out of 406 instances (considering both manuscript and cursive) or 2.7%, even less of a problem. To our knowledge no direct instruction occurred on this issue. It was occasionally a topic of conversation at Anna's writing table when another writer pointed it out, but for the most part the improvement came about without direct comment.

The other letter formation problem Anna demonstrated during Year II involved cursive, she often made comments about her dislike for cursive and the fact that it slowed down her composing. Since Ms. Caldwell left the decision about whether to compose in manuscript or cursive to the writer, Anna almost always chose to print. The class was exposed to traditional handwriting instruction on a regular basis.

Semantics/Pragmatics

Discussion of genre, topic and content will provide some insights into the semantic quality of Anna's writing. In depth semantic analysis will be assigned to further study.

Genre

It is clear from evidence provided in the composing in context section that Anna has control over the story structure of narratives. Some other genres have offered her more of a challenge.

All pieces Anna produced during Year II could be categorized similarly to those of Year I. Of the twenty-one pieces we observed her writing, twelve were narratives, two were classified expository and the remaining seven pieces were categorized as "Other."

As in Year I the familiar narrative provides few serious problems. Character and setting are often left mostly to the reader's imagination so that the writer can concentrate on plot. Events are carefully sequenced, and some are quite complex, e.g. Cat and Mouse. Anna likes to set her imagination free on these narratives and while most probably have some anchor in real events she has experienced, there is also an element of the dreamer in her narratives. She often likes to end her narratives with a twist, surprising the reader with an unexpected turn of events or explanation for the whole affair.

Expository pieces still give Anna problems. The composing in context section for those pieces illustrate that she isn't yet sure how to get information from a resource into her own composition. Her physical behaviors increase during those episodes; she sharpens pencils, talks to classmates, stretches, yawns, fidgets and in general evidences the same sorts of behaviors as graduate students writing dissertation proposals or professors writing first drafts of articles. Probably a safe prediction would be that given the same opportunity and freedom to produce expositories as she has narratives, Anna will become more comfortable and successful with that genre.

The pieces representing the "Other" genre are those Anna produced in response to her drawing or to story starter. As for quality of text, these pieces are decidely more constrained than are Anna's narratives. The pragmatics of producing these pieces are quite different from the narrative situations in that the drawing itself, the visual aspect, seems to stand for or represent ideas that need no further comment. To describe the picture would be redundant since the audience never reads the text without the accompaning drawing. Furthermore, the artistic element of the communication seems to be valued at least as much as the text by both the teacher and the other students. To compare this "Other" category syntactically, orthographically or semantically with either the narratives or the expository pieces would be like evaluating Faulkner by Picasso's standards. Even though Anna is neither a Faulkner nor a Picasso, we cannot gain much insight into her writing development by lumping these pieces together. The aspect of genre in semantic evaluation clearly illustrates why writing development must be examined within a context that includes all of the relevant elements of each composing event.

Topic and Content

Without exception the twenty-one pieces Anna wrote during Year II were self-selected topics. Even the story starters were chosen out of many possible options provided only as suggestions for those who needed some help selecting a topic. Some topics were repeat performers: visiting with friends, animal tales, and stories growing out of real events such as the Ariona State Fair and trips to Tucson and Rocky Point, Mexico.

Anna indicated she likes to make her readers laugh or show surprise when they read or listen to her pieces. She especially liked the piece about winning the lottery because she felt it was exciting to win money and go to places like Hawaii and Mexico. It is here we see the dreamer in Anna.

One interesting piece of information about the content of Anna's stories came up in a bi-monthly interview on April 28th. The researcher pointed out to Anna that she always ranked her make believe narratives higher on her preference list than narratives about real events. Anna replied by saying that it was always easier to write a made-up story "because your ideas just come and you can just write them down instead of remembering what you did." Anna doesn't yet appreciate her talent for having ideas "just come." With a supportive learning/writing environment perhaps Anna will develop that appreciation.

One other element of Anna's writing development which has not been discussed directly is her awareness of her own writing process, of her strengths and weaknesses, of strategies that either work or don't work and the reasons why some pieces turn out better than others. Her answers to questions on all the interviews reveal that either she hasn't yet developed this awareness or is reluctant to talk about it. This is where the composing in context information again becomes invaluable. When Anna composes her short twists on the end of a story, she may not be able to verbalize why she likes that strategy or why it works, but she is definitely aware of whether it works with individual readers. When she reads the finished piece aloud to an audience she watches carefully for a sign of recognition of her strategy, and when it comes she smiles with delight. Perhaps that is the beginning of metacognition relative to composing. Or perhaps because of cultural and/or personal attributes, others may never know what Anna knows about her own writing.

CHAPTER VII: GORDON

by Sandra Wilde

Introduction

Gordon is a lively, sociable, and creative child who provided a good deal of pleasure and laughter during the course of the study. He enjoyed being part of the research and often went out of his way to make sure that the researchers got the data they needed. Gordon was chosen as a subject who is average in terms of ability and development. His progress in third grade was satisfactory but not outstanding; at the end of that year a decision was made to put him in the elementary school's pre-fourth-grade class rather than promoting him to fourth grade in the intermediate school. This decision was as much for social reasons as for academic ones; Gordon's teacher felt he was less mature than many of the other students.

Gordon is well-liked by his peers, who enjoy his energy, enthusiasm, and quirky sense of humor. He spends a lot of time interacting with other children in school, some of it related to schoolwork and some of it purely social. Particularly in the second year of the study, other children became aware that Gordon was often a valuable writing resource for them; he was often able to help them think of an idea, figure out how to spell a word, or use the dictionary. He was especially helpful with Mark, a friend of his who was very insecure and unadept as a writer. Gordon often sat with Mark during writing time and gave him moral support and just the right amount of help.

Gordon's father was interviewed during the second year of the study. He reported that Gordon can basically understand Papago but speaks very little of it, although he wants to learn more of it. Gordon's sister has been learning to write in Papago in the intermediate school, and Gordon's father feels that he probably will do so too when he gets to the intermediate school. Both Gordon and his sixth-grade sister read and write a lot at home. Gordon writes every night and also brings home his stories from school. His writing at home is all in the form of stories. They have a big dictionary at home and Gordon uses it a lot when writing--his father feels that getting the dictionary was very helpful for Gordon's writing. When the researcher remarked on the variety of print and evidence of writing in the father's office, he mentioned that he often takes written work home (report writing, etc.) and that Gordon is very aware of it. Gordon's father was stuck by the improvement in Gordon's length and quality of story, handwriting, and spelling over 2 years. He is obviously very proud of Gordon's work and enjoys his imagination.

Ms. Howard, in May, also commented on Gordon as a person and as writer:

> He seems to enjoy writing even when it's not an assignment. He writes at home and he writes me letters frequently. He's a generous little boy and he's very aware of what's happening

with other people. When I was sick he sent me a get well card with a little story on it to make me feel better, so he uses his writing in his everday life. He's very aware of writing as communication and I think that shows when he's writing for an audience. When he knows that someone else is going to read it, his writing is to the point and he has a lot of information.

Gordon Writing : Year I

In the work of any writer, many linguistic and personal factors are interacting at once; these need to be examined to get a sense of all the influences going into a single composition. Gordon's writing process will be looked at across Year I and again across Year II from several perspectives, going from global to narrower concerns. A section sumarizing developmental trends will follow.

Concepts of Writing

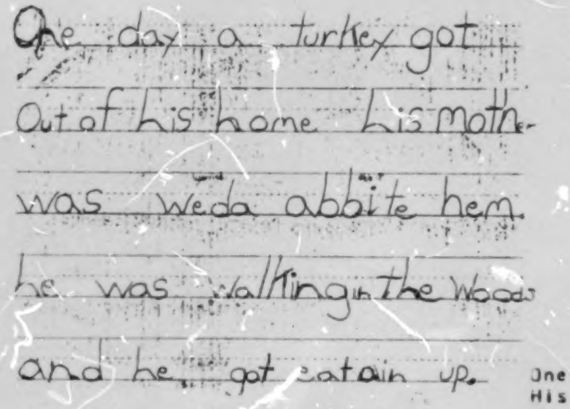
During writing concepts interviews in October and March, as well as in three periodic interviews about his stories, Gordon revealed a good deal about how he conceives of writing. To him, writing is a fairly straightforward, uncomplicated matter: "I just sit there, and then I think and then I write it." This is reflected in his composing behavior; he never agonizes over what to write about but just plurges right in. When asked why he chooses some of his stories as better than others, he usually refers only to the content, saying, for instance, that a story is good "because we found some eggs," or "because it's how the parrot got to talk." He also can give a very global assessment of why he likes a story: "it's the words, and the letters, and how it sounds." Also, he says that you can tell a good writer because their stories are sometimes funny and sometimes sad. He also feels that surface aspects of writing are important; he says consistently that a good writer is one who has good handwriting, "writes straight...and never makes no mistakes." A good writer doesn't write "sloppy or crooked," in contrast to bad writers who have messy papers when they erase, which "makes black marks and tears the paper." He also feels that his teacher would prefer his longer stories, that length is an important measure of a story's worth. He sees these surface aspects of writing as important for success in the adult world. Spelling is important because if you're "a police" you have to write well on the job. Other adults get forms where "they have to fill out all the blanks," and if words are misspelled, "he'll give it back to you." By contrast, Gordon feels that in writing a personal letter to another adult spelling doesn't matter because "it's your writing."

In general, these interviews reveal a writer who is relatively unsophisticated about the process, who likes a story if it's about something interesting, and who is aware of the impression made by surface aspects like spelling and handwriting. He is not yet able to talk about his stories or the writing process in a more detailed way.

Interaction

Gordon is a very active, sociable child who cannot easily sit still while he writes.

Figure VII-1 Gordon's Text 11/24/82

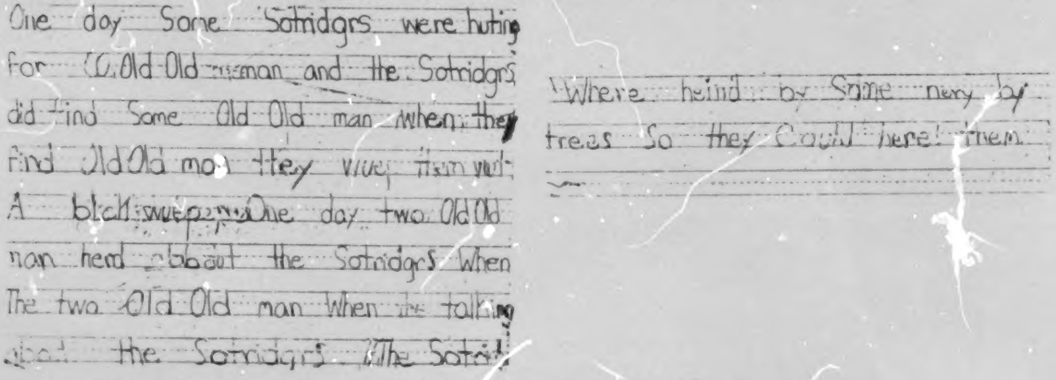


One day a turkey got
Out of his home His moth-
was weda abbite hem.
he was walking in the Woods
and he got eatain up.

One day a turkey got out of his home .
His mother was worried about him .
He was walking in the woods
and he got eaten up .

As he wrote this story, which is only 26 words long, Gordon stopped 14 times to talk to people. Some of these occasions are related to the writing, asking other children how to spell a word or asking for an eraser. Others are purely social, however: talking about Bingo (as he writes); asking the researchers if they're married; talking about a Thanksgiving song; or teasing Franny. An observer sitting with him gets a feeling of a fairly constant stream of interaction; even when he is writing silently, Gordon often is following a conversation elsewhere at the table and joins in when he has a comment to make.

Figure VII-2 Gordon's Text 3/4/82



One day Some Sotridgrs were huting
for Old Old man and the Sotridgrs
did find Some Old Old man when they
find Old Old man they wuep them with
A black wuep One day two Old Old
man herd about the Sotridgrs When
The two Old Old man When the talking
about the Sotridgrs the Sotridgrs
Where heind by Some nery by
treas So they Could here them.

One day some soldiers were hunting for old , old men
and the soldiers did find some old , old men .
When they found old , old men they whipped them with a black whip .
One day two old , old men heard about the soldiers .
When the two old , old men were talking about the soldiers the soldiers
were hiding by some nearby trees .
so they could hear them .

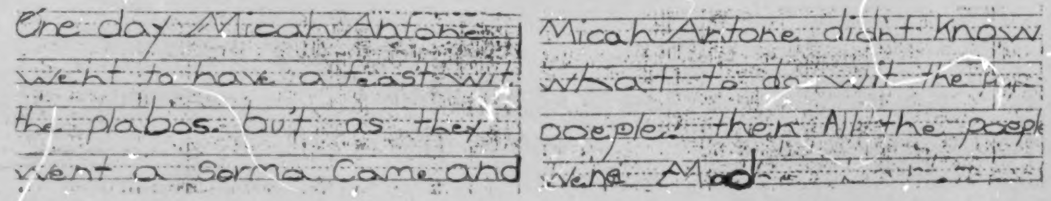
Gordon is interested in anything and everything. As he writes this story, he talks about a range of topics totally unrelated to the story. He says his mother has more money than she used to; goes to see what Vincent is reading; asks what the researcher and Charlie are talking about; asks his seatmates if anyone likes to watch FACTS OF LIFE and discusses TV with them; tells the researcher about a story Phyllis wrote; sings; teases Mark; asks Diane if she's Mark's cousin. The amazing thing is that he is able to do this while continuing to write his story and to keep up his train of thought, producing a story which his teacher called "super-imaginative." Although his stories are perhaps shorter than they could be because he spends so much talking, the interaction doesn't appear to interfere with his concentration. Many writers find it frustrating to try to write while people are talking around them, but Gordon appears to thrive on it. Although he is not this active every time he writes, it is certainly a common mode of behavior for him. In an interview in May, he admits that he likes to be active while he writes, and that he chooses to do so most of the time. He recognizes that there are children in the class who prefer to sit and write without stopping, and that both ways are valid.

Assignments

During Year I of the study, most of the writing the children did was assigned to some extent. They often had a choice between several topics, pictures, or story starters. All the children's writing was influenced in different ways and to different extents by these constraints.

On November 19, Ms. Howard asked the students to write imaginary diaries of child pilgrims on the Mayflower. The intent was to produce a collaborative effort, with all of the boys writing in one person for different dates and all of the girls in another person, so that the final product would be several diary pages for each character. The class chose a boy's name and a girl's name for these characters. The boy's name chosen was Micah Antone, which is a plausible name in the Papago community but not, of course, a typical name on the Mayflower. Ms. Howard spent quite a bit of time discussing the assignment with the class. She stressed writing in the first person and writing about things that might really have happened, and elicited ideas from them about what it might have been like on the Mayflower.

Figure VII-3 Gordon's Text 11/19/81



One day Micah Antone
went to have a feast wit
the plabos. but as they
went a Sorma Came and

Micah Antone didnt know
what to do wit the pe
poeple. then All the poepl
were Mad

One day Micah Antone went to have a feast with the Pueblos .
But as they went a storm came
and Micah Antone didn't know what to do with the people .
Then all the people were mad .

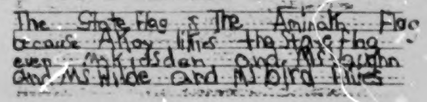
Gordon's product is a mixture of his teacher's and his own intentions. Like every child we observed working on this assignment, he wrote about his pilgrim character in the third person rather than the first. He does incorporate the fact that the pilgrims had a feast with Native Americans (although not Pueblos, who are a Southwestern tribe), and that they faced storms at sea, and ends up with the beginning of what could be an adventure narrative. This assignment was a difficult one for all the children, and Gordon dealt with it better than most, in the sense that he was able to produce a piece with some of the elements his teacher had been looking for.

In January, the class worked on a research unit on Arizona. One of the assignments was to produce stories about the state bird, flag, and tree, using encyclopedias as reference sources.

Figure VII-4 Gordon's Text 1/26/82

The green field stands for the forests .
It was named for George Washington .
The seal was adopted in 1889
and the flag was adopted in 1925 .
The state was named on the date 1889 .

Figure VII-5 Gordon's Text 1/28/82



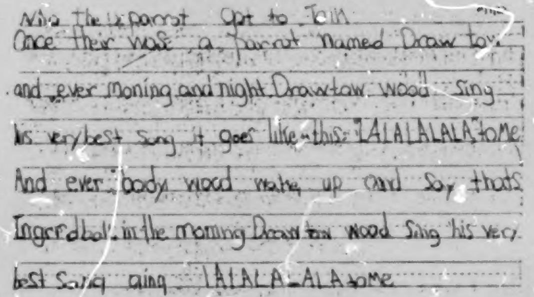
The State Flag s The Amirakn Flag
because Akoy likes the State Flag
even Ms Kidsdan and Ms Vaughn
and Ms Wilde and Ms bird likes

The State Flag is the American Flag because nonword likes the State Flag. Even Ms. Kasten and Ms. Vaughan and Ms. Wilde and Ms. Bird like.

On January 26, Gordon produced a text that contained to a great extent the kind of information his teacher wanted, but that was largely copied from the encyclopedia. He spent a fair amount of the writing period arguing with a classmate over whose turn it was to use the A volume of the WORLD BOOK (which was, of course, much in demand.) The resulting text is very flat in tone and unlike his usual writing style. On January 28, he also wrote about the state flag. This incomplete piece is a very different approach to the topic than the earlier one. Rather than writing a report, he personalizes the topic by writing about people liking the flag and including the names of all the researchers. Ms. Howard was very dissatisfied with the research unit as a whole, feeling that she had asked the children to do something too difficult. When faced with an assignment that was beyond his capabilities (i.e., a true research paper), Gordon attempted one day to produce the kind of product his teacher wanted and another day to write in his usual way. One can't really determine from the available evidence which he preferred doing; he did, however, seem more serious while writing the first one and more playful during the second one.

On February 9, the class had begun a unit on folktales. They had read some together, and their writing assignment was to do a story along the lines of HOW THE LEOPARD GOT SPOTS or HOW THE RATTLESNAKE GOT ITS RATTLE. Gordon chose to write about HOW THE PARROT GOT TO TALK.

Figure VII-6 Gordon's Text 2/9/82


Nwa the parrot Got to Talk
Once their wase a parrot named Draw tow
and ever moning and night Drawtow wood sing
his very best song it goes like this: "LALALALALA" to me
And ever body wood wake up and say thats
Ingredbol. in the morning Drawtow wood sing his very
best song aing: LALALA-ALA to me

How the Parrot Got to Talk .
Once there was a parrot named Drawtwo
and every morning and night Drawtwo would sing his very best song .
It goes like this : " LALALALALA , " to me .
And everybody would wake up and say , " That's incredible . "
In the morning Drawtwo would sing his very best song again : " LALALALALA
" to me .

After writing the title, Gordon didn't really stick to the topic at all, but wrote the beginnings of a personal fantasy about having a parrot who would sing to him. He used the assignment only as an idea source, and then went off in his own direction. His teacher liked the story a lot, saying that it sounds like the way he talks and thinks.

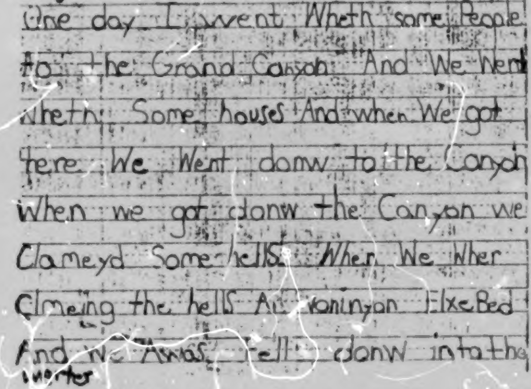
In general, Gordon is able to handle the constraints of assignments because he takes control of the process and decides how much he'll let himself be influenced by the assignment. The 4 stories above illustrate a range of choices, from paying only minimal attention to the assignment to trying to produce just what's expected. Gordon often went in his own direction on an assignment; it is important that his teacher allowed this to happen. Although Ms. Howard was sometimes disappointed when the stories produced by the children in response to an assignment didn't live up to her expectations in terms of content, she rarely pressured them to change their work to fit those expectations.

Topic Development and Style

Gordon's stories are for the most part imaginative narratives with a lot of action. He writes in both first and third person, but none of his pieces are factual accounts of his own life. He often puts a special imaginative twist on a fairly ordinary topic.

Gordon's story about a turkey (See Figure VII-1) is one of his early ones from Year I. It is a very short and simple story but has a clear beginning, middle, and end. Gordon obviously has a sense of story right from the beginning of the study. Although many of his stories (such as the one about the old, old men and the soldiers - see Figure VII-2) don't have a real ending, this is probably due to the limited time allowed for writing (usually 20 minutes) rather then to his lacking a sense of how plots develop.

Figure VII-7 Gordon's Text 1/7/82

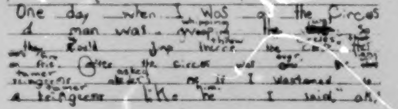


One day I went Wheth some People
to the Grand Canyon And We Went
Wheth Some houses And when We got
there We Went donw to the Canyon
When we got donw the Canyon we
Clameyd Some hells When We Wher
Clmeing the hells A vaninyon ElxeBed
And We Awas Fell donw into the
werter

One day I went with some people to the Grand Canyon .
And we went with some horses .
And when we got there we went down to the canyon .
When we got down the canyon we climbed some hills .
When we were climbing the hills a volcano exploded .
And we almost fell down into the water .

On January 7, Gordon was writing about a picture of the Grand Canyon. Often when he writes Gordon will spend time at the beginning setting the scene, and then add action later as ideas occur to him. He typically does little planning ahead before he writes, preferring to construct meaning as he goes along. In this case, he begins writing immediately, makes comments to the researchers only about spelling and other surface features, and never discusses what he's going to write about. The last sentence of this story adds a typical Gordon twist; where another child might have stuck to a hiking story, Gordon adds an exploding volcano.

Figure VII-8 Gordon's Text 3/9/82



One day when I was at the circus a man was whipping the lions so
they would jump through the circle that's on fire .
After the circus was over the lion's trainer asked me if I wanted
to be a trainer like him .
I said , " O.K. . "

On March 9, the students were asked to write about what circus act they would like to be. Again, Gordon adds a typically vibrant touch, about lions being whipped so they will jump through flaming circles. This a very short story, no more than a vignette really, but it creates an image very effectively.

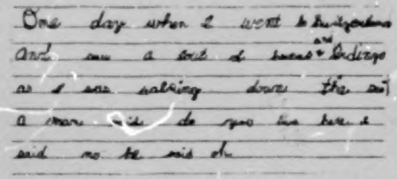
Another interesting feature of these pieces is that they all begin with the words ONE DAY. The vast majority of his narratives begin with ONE DAY (along with variations like ONE CHRISTMAS NIGHT and ONCE UPON A TIME). This is another index of his straightforward, relaxed approach to writing. When he is ready to write, he sits down and begins in the most convenient way, confident that once he starts writing, the ideas will develop. Many adult writers who are terrified at the sight of a blank piece of paper could learn a lot from Gordon.

Syntax

Gordon uses a variety of syntactic structures in Year I. His turkey story from November 24 (See Figure VII-1) is low in both words per T-unit (6.5) and clauses per T-unit (1.0). It is made up of 4 relatively short T-units with no subordinate clauses. By contrast, stories from March 9 (See Figure VII-8) and March 30 (See Figure VII-9) are quite complex syntactically.

Figure VII-9 Gordon's Text 3/30/82

One day when I went to Switzerland and saw a lot of houses and
buildings , as I was walking down the street a man said , " Do you live
here ? "
I said " No . "
He said " Oh . "



The story about the lion tamer has 3 T-units, of 24, 19, and 3 words, or an average of 15.31 words/T-unit. These T-units contain 4, 5, and 2 clauses respectively, for an average of 3.7 clauses per T-unit. The Switzerland story is similar: T-units of 29, 3, and 3 words (an average of 11.66) with 4, 2, and 2 clauses respectively (an average of 2.66). Looking at two of the actual sentences involved illustrates the level of syntactic complexity that Gordon is able to handle:

> ONE DAY WHEN I WAS AT THE CIRCUS A MAN WAS WHIPPING THE LIONS SO THEY WOULD JUMP THROUGH THE CIRCLE THAT'S ON FIRE.

In this sentence, a main clause (ONE DAY...A MAN WAS WHIPPING THE LIONS) is modified by an adverbial clause of time (WHEN I WAS AT THE CIRCUS) and another one of intention (SO THEY WOULD JUMP THROUGH THE CIRCLE), which itself is modified by a nominal (THAT'S ON FIRE).

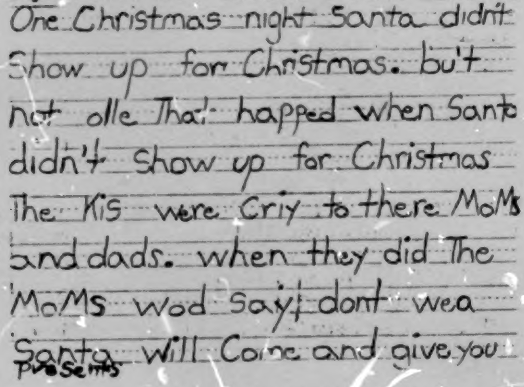
> ONE DAY WHEN I WENT TO SWITZERLAND AND SAW A LOT OF HOUSES AND BUILDINGS, AS I WAS WALKING DOWN THE STREET A MAN SAID, "DO YOU LIVE HERE?"

This sentence contains a main clause (ONE DAY...A MAN SAID) and a direct question ("DO YOU LIVE HERE?"), aw well as adverbial clauses of time and manner. These two sentences are so complex because they each modify a main clause in more then one way. Although syntactic complexity of this type occurs only occasionelly in Gordon's writing, it certainly indicates what he is capable of doing. (Developmental trends in syntax will be discussed below.)

Spelling

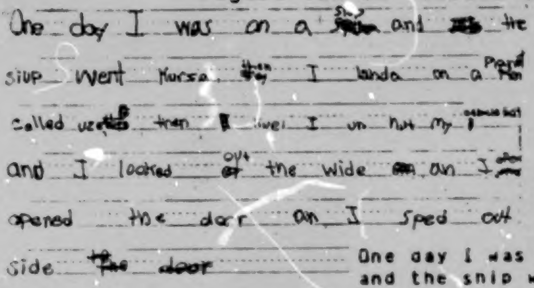
Gordon's spelling and punctuation vary a good deal from story to story, as will be discussed in the developmental section below. However, an important feature to look at is the types of invented spelling he uses and the linguistic systems he is drawing on.

Figure VII-10 Gordon's Text 12/3/82


One Christmas night Santa didnt
Show up for Christmas. bu't
not olle That happed when Santa
didn't Show up for Christmas
The Kis were Criy to there MoMs
and dads. when they did The
MoMs wod say, dont wea
Santa will Come and give you
presents

One Christmas night Santa didn't show up for Christmas .
But not only that happened when Santa didn't show up for Christmas
.
The kids were crying to their moms and dads .
when they did the moms would say , " Don't worry .
Santa will come and give you presents . "

Figure VII-11 Gordon's Text 5/4/82


One day I was on a ship and [illegible] the
siup went kursa. then I landa on a plent
called uze then [illegible] I un hut my [illegible]
and I looked out the wide an on I [illegible]
opened the dorr on I sped out
side [illegible] ~~door~~

One day I was on a ship
and the ship went crazy .
Then I landed on a planet called uze .
Then quickly I unhooked my seatbelt
and I looked out the window .
And I opened the door
and I stepped outside .

On December 3, Gordon was very involved in his writing, with few distractions of any kind, while on May 4 he was quite restless; Ms. Howard described it as being a day where "he was very nervous and upset and climbing the walls." These occasions were thus very different for him, but on both of them, he chose to not ask for help with spelling or to look up words. As a result, both of these stories contain a number of invented spellings, 8 different ones in the Christmas story and 9 in the outer space story.

Several linguistic features can be seen operating in these invented spellings. Some examples are:

phonetic:	an/and
	kis/kids
	wea/worry
	wod/would

The examples of phonetic influence are those where a child is attempting to spell the word more or less the way it sounds. Even WEA and KIS are not implausible phonetic spellings in light of Gordon's Papago dialect of English.

grapho-phonic
patterns: kursa/crazy
kuel/quickly
cebclebat/seatbelt

In these examples, Gordon begins each word with an incorrect but plausible letter. Interestingly, the first two words each begin with the phoneme /k/, which is the letter Gordon uses to spell them with. SEATBELT begins with the letter S and the phoneme /s/, but Gordon has in this case chosen an alternate spelling of the phoneme.

real word
substitutions: an/and
sped/stepped
there/their
wide/window

When children aren't sure how to spell a word, they may substitute a real word, which may be a homophone as in there/their.

morphemic
patterns: criy/crying
landa/landed
kuel/quickly
un hut/unhooked

An important aspect of spelling for children to gain control over is morphological affixes such as inflectional and adverbial endings. These examples illustrate that Gordon has not completely learned to abstract these out yet, although he does spell ED conventionally in other words in these stories and ING in other stories. (He uses no other LY adverbs in Year I.)

punctuational: bu't/but
dont/don't
un hut/unhooked

Gordon has learned that some words ending in T have apostrophes in them; he just hasn't completely learned which ones (although BUT is the only word he ever puts one in inappropriately). Similarly, children take a while to learn exactly where some word boundaries fall. (In other stories Gordon writes COWBOY RUSTLER as one word and NEARBY as two.

Handwriting

The stories from November 24 (Figure VII-1), March 9 (Figure VII-8) and March 30 (Figure VII-9) provide a sense of Gordon's

Table VII-1 Words per Story: Gordon Year I

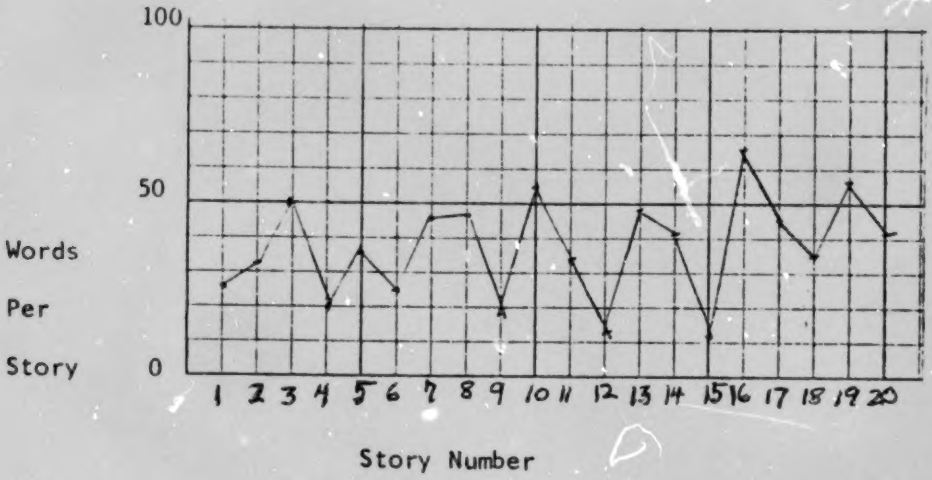


Table VII-2 Words per T-Unit: Gordon Year I

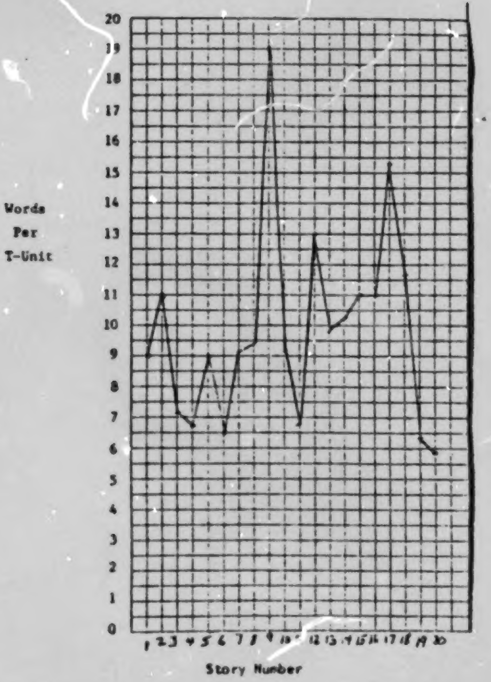


Table VII-3 Clauses per T-Unit: Gordon: Year I

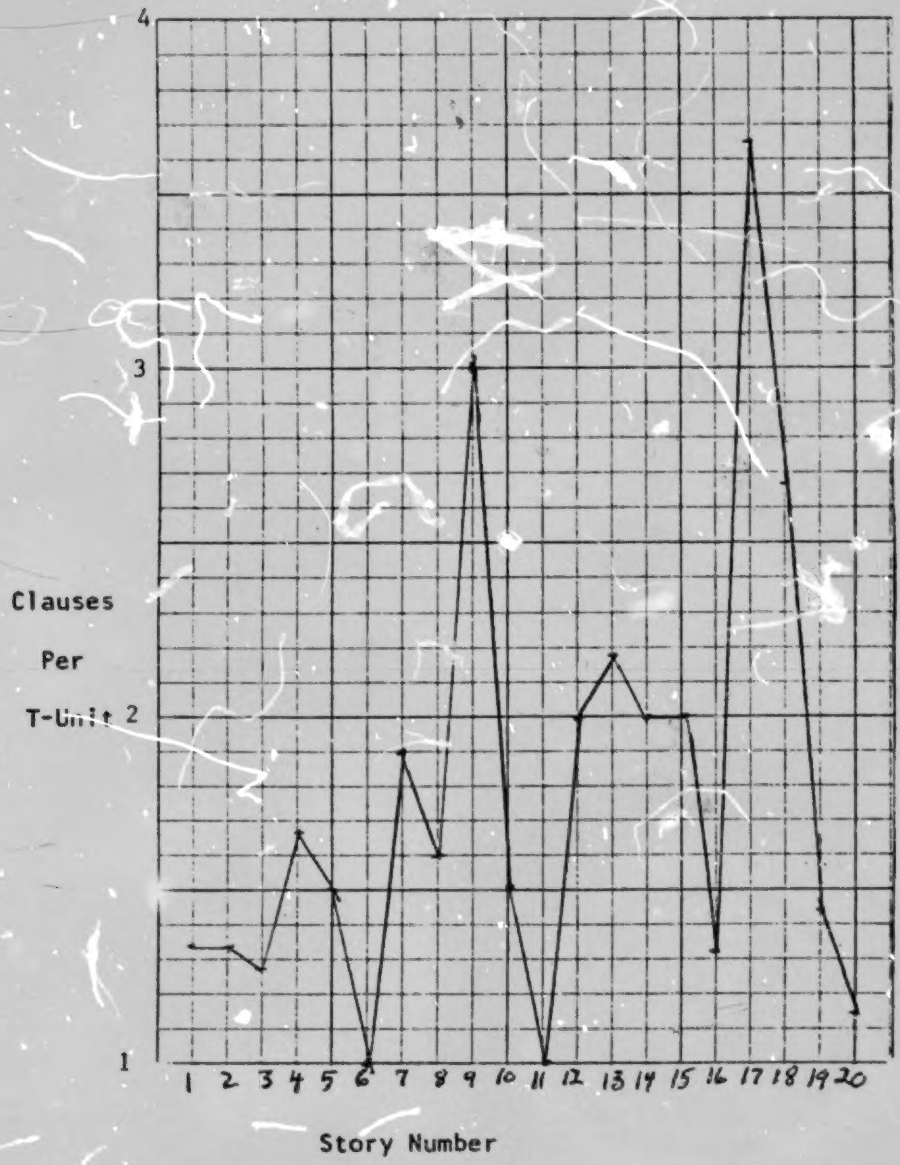


Table VII-4 Percent Conventional Spelling: (Gordon Year I

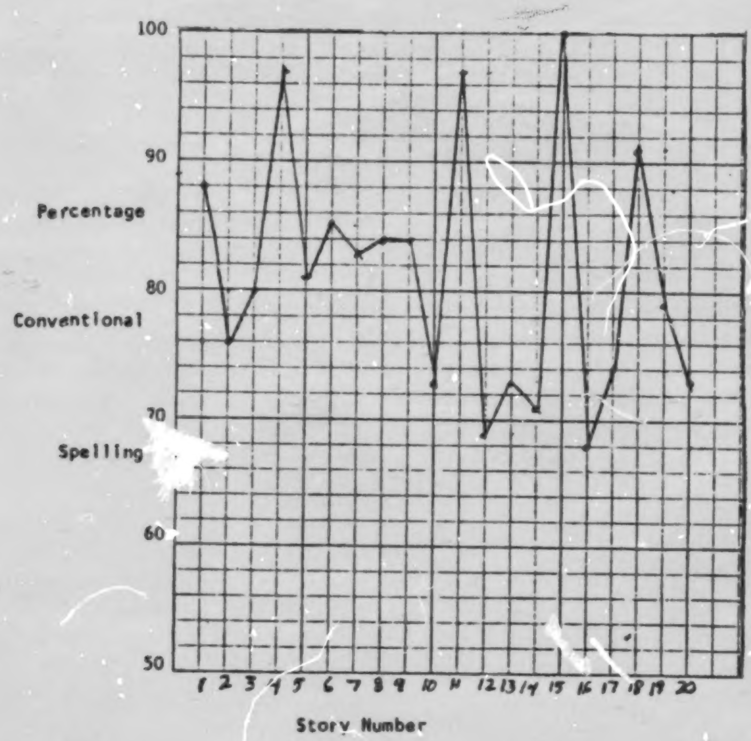
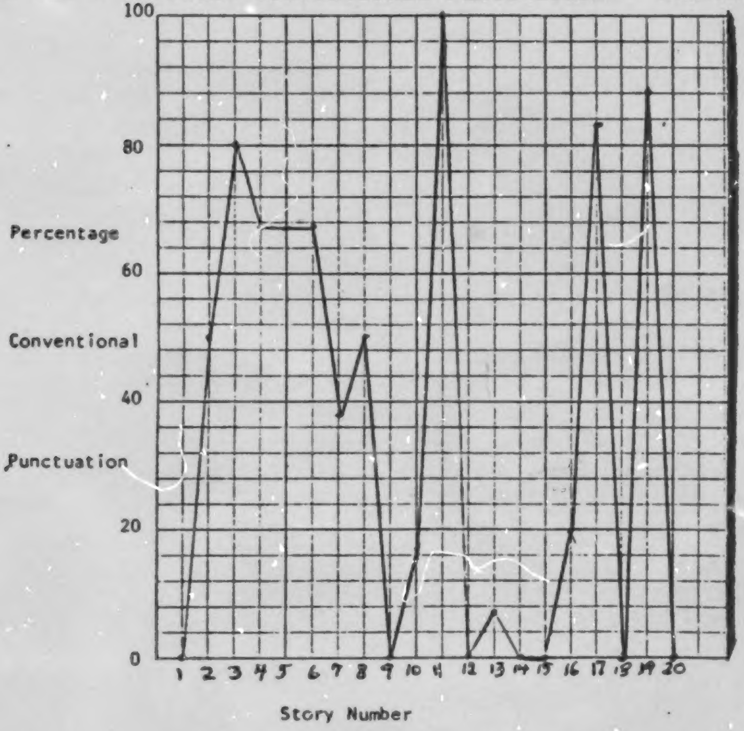


Table VII-5 Percent Conventional Punctuation: Gordon Year I



handwriting at three different points in the year. Early in the year, handwriting was a relatively slow and labored process for him. He is left-handed, and on November 24 the researcher noticed that he made many of his letters unusually; for instance, he starts his S's at the bottom rather than the top. There is almost a sense that he is drawing each letter individually; i.e., that handwriting is not yet very automatic for him. His handwriting is large and he only fits about 5 words on a line. By March 9, manuscript printing has become far easier for Gordon. He is faster, his letters are smaller and more regularly formed, and he does not have to devote much conscious effort to details of handwriting. Not all of his stories are written as neatly as this one, but this one indicates what he is capable of when he chooses neatness as one of his goals for a story. It should be noted that Ms. Howard did not provide any penmanship instruction to the students; this change in Gordon seemed to come about primarily through spending time on writing. By March 30, Gordon had begun writing some stories in cursive script, which Ms. Howard had suggested that the students do. Since this is a new process for him, he returns to making his letters slowly and carefully at least some of the time. He has a little trouble forming some of the letters (e.g. K in WALKING; S in SEET), but is eager to write in cursive and perseveres. In his May interview, he mentions that he prefers cursive and writes with it most of the time now that he has learned it. He even says that he finds cursive easier than manuscript.

Developmental Trends: Year I

Any single piece of Gordon's writing involves many factors interacting at once, as described above. It is also instructive to look at some of these aspects across time, particularly those aspects that can be quantified. An early story like the one about the turkey (Figure VII-1) is clearly different in many ways from a later one like that about the soldiers and the old, old men. Can these differences be characterized? Tables VII-1 through VII-5 illustrate aspects of Gordon's development across the 20 stories that were collected in Year I.

The most striking aspect of these graphic representations is the amount of variability they show. These measures indicate not a gradual change from story to story but extreme shifts between stories. These shifts are, of course, due to the variability of writing situations -- the topic, the child's mood, choices about whether to try to spell conventionally or not, amount of social interaction, and other factors which interact to produce texts which differ in these quantifiable ways as well as more impressionistic ones. However, cognitive development is also likely to be a factor; one can perhaps get some sense of it by comparing groups of stories. Gordon's 20 stories for the year were divided in half chronologically for comparative purposes, and the following figures derived:

Table VII-6 Gordon Year I: First and Second Half

	First Half	Second Half	Overall
Words Per Story	35.9	39.3	37.6
Words Per T-unit	8.75	8.93	8.84
Clauses Per T-unit	1.48	1.72	1.61
Percent Conventional Spelling	81.9	77.1	79.4
Percent Conventional Punctuation	47.6	27.9	35.0

Gordon's stories stay within a fairly narrow range of length throughout the year (from 11 to 66 words, with a mean of 37.6 and a median of 38.5). Although he is able to write faster later in the year as he gains more control over his penmanship, his stories in the second half of the year are only slightly longer on the average than those in the first half.

Gordon's number of words per T-unit varies quite a bit, ranging from 5.85 to 19.0. (The latter is a one-T-unit story.) His mean for third grade of 8.84 is the highest of all of our subjects, and is higher than Hunt's (1970) fourth-grade average of 8.6. There is a slight increase from the first to the second half of the year. Clauses per T-unit vary from 1.0 to 3.66, with a mean for the year of 1.61, which approaches the 8th-grade mean of 1.68 reported by Hunt (1970). The means for the two halves of the year are 1.48 for the first half and 1.72 for the second half, which shows considerable growth since clauses per T-unit grow in fairly small increments, usually only about 0.1 per year. (Hunt, 1970) Looking at Table VII-3, one can see that in the first half of the year only 1 story out of 10 has more than 2 clauses per T-unit; this is a very short story with only 1 T-unit. In the second half of the year, 6 out of 10 pieces have 2 or more clauses per T-unit (These include the stories seen in Figures VII-5, 6, 8, and 9).

Gordon's percentage of conventional spelling ranges from 68% in the story about the soldiers and the old, old men to 100%, with a mean of 79.4%. There is a slight drop from the first to the second half of the year, but it is small when considered in terms of the total variability. Of the 20 words Gordon uses most frequently, which make up 39.7% of his total words, 97.1% of their occurrences are conventionally spelled. There is a floor of about 70% conventional spelling below which Gordon rarely falls. The 20 most frequent words account for a little more than half of this, but the 70% floor also means that Gordon is quite successful in spelling words he uses less often (i.e., 6 or fewer times during the years).

Gordon's percentage of conventional punctuation varies even more than his spelling does, ranging from 0 to 100%, with a mean of 35.0%. Table VII-7 shows more details of Gordon's use of punctuation.

Table VII-7 Punctuation Data Sheet: Gordon Year I

	TYPE	OBSERVED	EXPECTED	CONVENTIONAL	INSERTED	OMITTED	SUBSTITUTED (OR/ER)	% CONVENTIONAL ($\frac{\text{CONVENTIONAL}}{\text{OPPORTUNITIES}}$)
	, Commas	1	14	1	0	13	0	7% ($\frac{1}{14}$)
	. Periods	35	71	35	0	36	0	49% ($\frac{35}{71}$)
	? Question Mark	1	2	1	0	1	0	50% ($\frac{1}{2}$)
	! Exclamation Mark	0	0	0	0	0	0	N/A (0)
	" " Quotation Marks	2	20	2	0	18	0	10% ($\frac{2}{20}$)
OTHERS	:		3	0		3		0% ($\frac{0}{3}$)
	TOTALS:	39	110	39	0	71	0	35% ($\frac{39}{10}$)

For the most part, periods are the only punctuation marks that Gordon uses, and he omits them about half of the time. He has begun to use dialogue in his stories but only uses quotation marks once, omitting 9 pairs of them. His only problem with punctuation is omitting it; he never inserts extraneous punctuation or substitutes one mark for another. From the first to the second half of the year, there is a drop from 47.6% to 27.9% conventional punctuation. Of the 49 omitted punctuation marks in the second half, 16 are quotation marks, reflecting his use of a new form which he is not fully sophisticated in the use of yet. His other omissions are mainly periods; one suspects that he hasn't forgotten how to use them (since he still does so effectively in some stories), but has forgotten or not bothered to include them. One is reluctant, therefore, to call this a developmental drop; it seems rather to be a context-induced variability.

6

Gordon Writing - Year II

During Year II of the study, Gordon had a successful year in Ms. Caldwell's pre-fourth-grade class. He continued to explore a variety of aspects of writing and one can again get a sense of him as a writer by examining several of these aspects.

Concepts of Writing

Interviews in October and in April about various aspects of writing as well as periodic interviews about his stories reveal the nature of Gordon's explicit knowledge and attitudes about writing. He continues, as in Year I, to mention both global aspects of writing and surface-level ones.

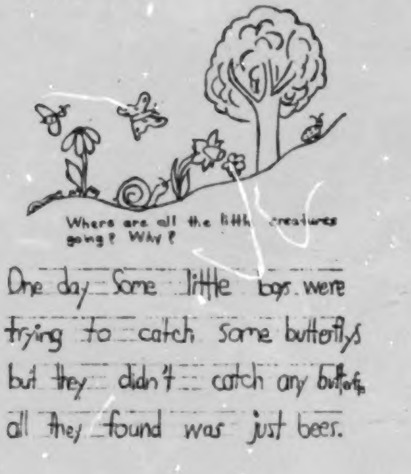
A story of his is a good one because of "how it sounds" or "what it's about." Good writers are those who "write straight...It seems like they use a ruler...they keep their hands straight." A good writer he knows "writes fast and she doesn't make no mistakes." Bad writers "write sloppy and they keep erasing and they make like a black stain." However, he has also begun to be able to specify more about the qualities that make a story "sound good." He says that one of his stories is good because of a little surprice twist in the plot, and that his teacher, who is a nun, would like one of his stories because "it's talking about God." Good writers are those who write funny stories and stories with "interesting stuff put in." When asked why he liked one of these stories less than some others, he said, "It's just about going in somebody's house! I mean it sounds boring like." When discussing why his teacher would like some of his stories better than others, he talks both about how interesting they are and about surface features (e.g. a story where "I spelled the letters right this time" is better than one where "my lines are crooked."). However, when pressed as to whether she'd prefer an interesting messy story over a boring neat one, he chooses the former because "I can just copy it over" to make it neater.

Gordon also shows that he is beginning to take a slightly broader perspective on each piece of writing. In October, he says that the first thing he does when he writes a story is, "Sometimes I always put 'one day'," and that at the end he puts a period, and "if I don't feel like writing any more I can just write the ending." By April he says that the first thing he does is to think of a title, and that the last thing he does is to "read it over and see if it makes sense." These comments don't necessarily reflect a change in his actual behavior, but they do suggest that he may be thinking of a story more holistically and less as a linear string.

Interaction

During Year II, Gordon continues to spend a good deal of time interacting with other people and using the physical resources of his classroom. On the afternoon of September 21, he wrote a fairly short story during which he kept up a steady stream of talk and activity.

Figure VII-12 Gordon's Text 9/21/82



Where are all the little creatures going? Why?

One day Some little boys were
trying to catch Some butterflys
but they didn't catch any butterfs
all they found was just bees.

One day some little boys were trying to catch some butterflies.
But they didn't catch any butterflies.
All they found was just bees.

Much of this activity is related to the writing of this story; at different points, he reads the story starter aloud; says "How do you spell CATCH?" to the researcher (who he knows won't tell him), then looks at a word list on the wall and says "I remember how to spell it."; looks at a dictionary Anna is using; gets another dictionary but can't find BUTTERFLY in it; goes to get another dictionary, looks at it while standing by the shelf, then brings it back; says "butterflies" as he writes, adding an S; and looks for three more words on the wall chart.

Some interaction involves the other children's writing: Gordon gives Anna an eraser; tells Anna how to spell DRAGON; helps David find a word; and helps Mark spell something.

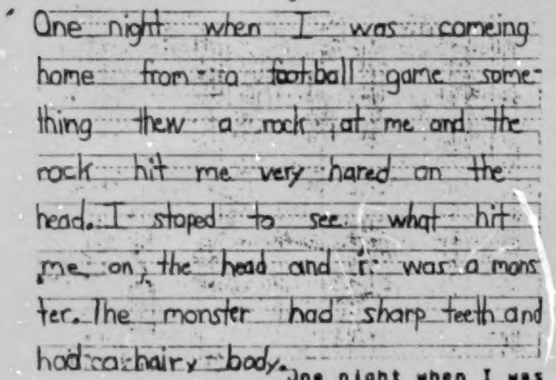
The children came to learn that Gordon was a good person to ask for help with spelling and dictionary use, but on this occasion most of his assistance came about because he was both tuned in to the needs of other children and eager to help with spelling because he enjoys it intellectually.

Some of his activity is also purely social or self-expressive; he talks with David about drums; sings "butterfly, butterfly" as he brings a dictionary back to his seat; and chit-chats with the researcher.

As he did in Year I, Gordon is able to maintain adequate concentration on his writing as he talks and moves about the room. In one sense, this behavior interrupts his writing, in the sense that he isn't sitting focused on his paper at all times. But in another sense, we have no idea whether the actual writing PROCESS is interrupted, since he is able to stop and do something every few words but still maintain his train of thought.

On November 16, Gordon writes a story twice as long as the one with the butterflies, which he is able to do even though he is engaged in a constant stream of activity, much of it totally unrelated to the story he is writing.

Figure VII-13 Gordon's Text 11/16/82



One night when I was comeing home from a football game something thew a rock at me and the rock hit me very hared on the head. I stoped to see what hit me on the head and it was a monster. The monster had sharp teeth and had a hairy body.

One night when I was coming home from a football game something
threw a rock at me
and the rock hit me very hard on the head .
I stopped to see what hit me on the head
and it was a monster .
The monster had sharp teeth and had a hairy body .

The following examples give a feel for Gordon's personality and wide range of interests:

- **Gordon gets up to change the date on the calendar, then spends 2-3 minutes putting the cards with the days on them in order.**
- He asks, "Does coming home from the football game mean that you were going home from the football game?"
- "Does football game go together?" (i.e., should it be written as one word?). He decides that there should be a space between FOOT and BALL, but smaller th[illegible] usual one between words because "they're t[illegible]."
- Gordon looks up and whistles (trying to get the researcher's attention to show her he'd used a hyphen, which they'd discussed previously).
- He looks at the GUINNESS BOOK OF WORLD RECORDS with Gary and Susan.
- Gordon tells Gary he's just made a period (which he later erases) in the shape of a diamond.
- He talks with Gary about Elvis Presley, they sing bits from favorite songs and talk about the movie THE WALL.
- He asks Gary about his story, then sings a line from THE WALL: "Hey teacher, leave those kids alone," and talks about the movie some more.
- Gordon spends 5 minutes talking about the carnival and rodeo and movies with Gary.

- He also asks the researcher if she "smokes weed" and talks about people he knows who do.
- Gary asks the researcher if any words start with X. Gordon says "exorcist," and he and Gary talk about that and other scary movies.
- Gordon rips his paper while erasing, pretends to cry, looks to see if the researcher wrote that down, looks for tape, fixes the rip, talks about his fingerprints on the tape.
- Says to the researcher, who he knows won't tell him how to spell words, "How do you spell SHARP? Just spell me it once." (said in a pleading tone)

This level of activity is probably unique to Gordon and not all of his writing episodes are as frantic as this one. Many writers may need to be much quieter in order to concentrate, but the important point here is that writing can go on successfully in the presence of a very extensive amount of interaction.

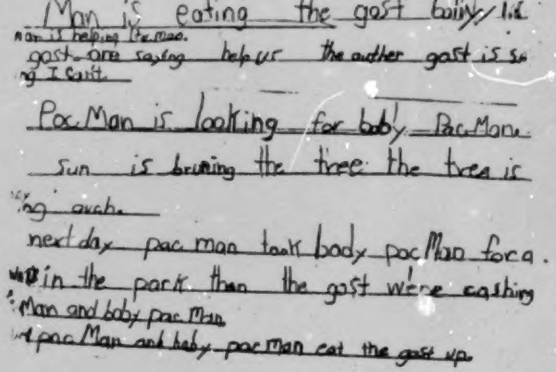
Meaning Creation

In Ms. Caldwell's classroom, writing was virtually always unassigned. There were often subjects that the class as a whole was learning about which often emerged as themes for writing, but the children always had the option of choosing their own topic. There were often story starters available, but they were presented in a low-key way, as a source of ideas for children who didn't know what to write about, a problem Gordon rarely had. During the year, Gordon wrote stories which touched on a wide variety of topics, genres, and elements of his culture. Several of these stories will be discussed to illustrate the variety of ways in which Gordon creates meaning. They will be presented in chronological order to give a feel for his development over time.

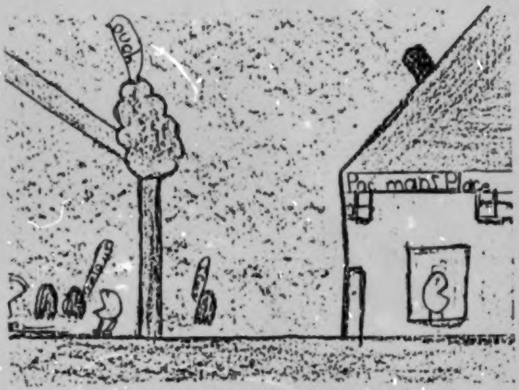
Popular Culture

In the fall of Year II, a Pac-man craze swept through Ms. Caldwell's room. The video game was at the height of its popularity, and the TV cartoon show based on the character had just begun. At this point in the school year, Ms. Caldwell had her students draw a picture first thing in the morning which their writing was then based on. There was a period of a week or two when Pac-man was the most popular subject for pictures and stories, not least because he's so simple to draw.

Figure VII-14 Gordon's Text and Picture 10/7/82



Man is eating the gost baby/ Pac
man is helping the man.
gost are saying help us the auther gost is sa
ng I can't.
Pac Man is looking for baby Pac Man
Sun is bruning the tree the trea is
ng ouch.
next dax pac man took body pac Man for a.
in the park than the gost were cashing
Man and baby pac Man
pac Man and baby pac man eat the gost up.



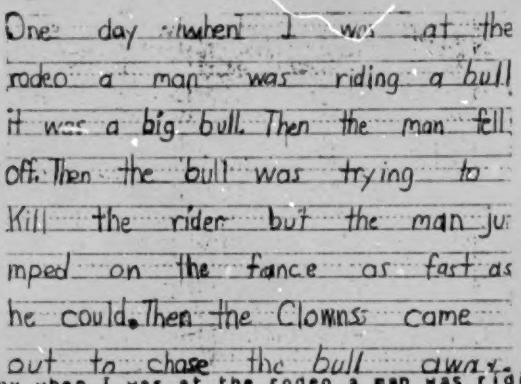
Pac Man is eating the ghost .
Baby Pac Man is helping Pac Man .
The ghosts are saying , " Help us . "
The other ghost is saying , " I can't . "
Mrs. Pac Man is looking for Baby Pac Man .
The sun is burning the tree .
The tree is saying , " Ouch . "
The next day Pac Man took Baby Pac Man for a walk in the park .
Then the ghosts were chasing Pac Man and Baby Pac Man .
But Pac Man and Baby Pac Man ate the ghosts up .

Much of Gordon's creation of meaning for this story took place while he was drawing his picture. The first half of the story, up to OUCH is clearly based on the picture. He wrote that much fairly quickly after he had finished drawing, then went to talk to his teacher and came back and wrote the rest, which is not about the picture but talks about the next day. When Gordon read his story to the class during sharing time, the children noticed how long it was, since they were asked to write only 4 lines to go with their pictures. Ms. Caldwell told the class that he had finished early so that she had told him he could write Chapter 2, and suggests that other children can do the same if they finish early. The other important point about this story is what it suggests about cultural influences. One might assume that for Papago children to write about their culture would mean writing about legends, the desert, and other aspects of Native American culture. But the culture they are living in also includes Pac-Man, Peanuts, and Pink Floyd, all the elements of North American "fourth-grade culture." It is only to the outsider that these two sets of influences are so separate; to the child, his or her culture is for the most part a seamless whole.

Papago culture

On November 9, many of the children were writing rodeo stories since it was around the time of the annual Papago rodeo and carnival.

Figure VII-15 Gordon's Text 11/9/82



One day when I was at the
rodeo a man was riding a bull
it was a big bull. Then the man fell
off. Then the bull was trying to
Kill the rider but the man ju
mped on the fance as fast as
he could. Then the Clowns came
out to chase the bull away.

One day when I was at the rodeo a man was riding a bull
It was a big bull .
Then the man fell off .
Then the bull was trying to kill the rider
but the man jumped on the fence as fast as he could .
Then the clowns came out to chase the bull away .

Although an outsider might not recognize this story as having particularly Papago content, the rodeo experience is a major cultural event in the lives of present-day Papago children. It isn't known if Gordon based this story directly on an incident he saw or not, but he certainly could have. His teacher comments that it's less imaginative than some of his others, because "it's usually what happens at the rodeo...It could be almost factual." However, what this story lacks in imagination it makes up for in plot structure. It has a clear, interesting sequence of events, which Gordon recognizes himself when discussing this story in an interview. He says it's a good story because the rider jumps on the fence "so he could be safe," and because "it also has the clowns in it, chasing the bull away." Perhaps when Gordon is writing a story based on real events, he can structure the plot more tightly since he already knows more specifically what the sequence of events is going to be.

Horror Stories

Most children around fourth grade like horror movies and stories, and Gordon is particularly fond of them. He wrote quite a few "scary stories" in Year II. In his story from November 16 (see Figure VII-13), he began with a real incident and extrapolated from it to the supernatural. When asked how he got the idea for the story, he says, "When my father took me to a football game I just decided to write about it and the monster." (He says that in real life it wasn't at all scary when he came home from the football game, and he didn't see any monsters.) His teacher comments that it begins with a realistic incident of being hit on the head with a rock and then goes in the direction of fantasy. She feels it's just an introduction to a story and wishes he'd gone further with it, but appreciates the plot twist, the way it "could be taken from <a real> incident and then changed into a creative figure." It is typical of Gordon to start a story in a low-key uneventful way in order to set a scene and provide a context for his imagination to work on. His ideas often came not before he begins to write but during the process of writing.

Christmas Stories

The children in the study often wrote stories about Christmas and other holidays.

Figure VII-16 Gordon's Text 12/2/82

One Christmas night I left some Christmas cookies for Santa .
But when Santa came to get the cookies , the cookies were not there
.
Santa did not eat the cookies .
Santa knew that Darnell ate the cookies because Darnell saw me bake
the cookies .
The next day Santa came back
and I gave Santa some cupcakes
and Santa said , " Thank you . "
And Santa said that I will get some presents if I be good .

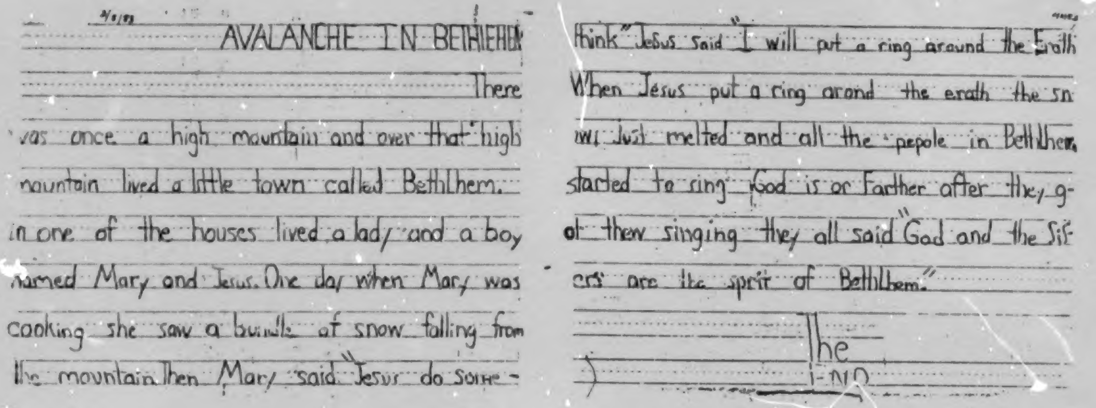
For the whole year I was good .
And one Christmas Eve night Santa came down our chimney
and he gave me millions and millions of presents .
And the last present I opened was a big bike .
I tried to ride it
and I fell off because I was not hanging on .

On December 2, Gordon wrote a highly episodic Christmas story. It is made up of several events; leaving cookies for Santa but having them stolen by a friend, meeting Santa and talking about being good and getting millions and millions of presents as a result, and getting a big bike and falling off. Although he knows the story is fictional, in that he didn't really bake cookies for Santa, he feels that one part is somewhat realistic: "It was for real...I know Darnell would take the cookies." The story effectively combines traditional elements of the Santa-story genre and Gordon's own personal touches. He was very pleased with it; later that afternoon he was editing it to turn it into a book, which primarily involved correcting his spelling. When asked by the researcher if he was going to change the content, he said (jokingly), "No, I think it's perfect."

Religion

Gordon on occasion chose to write about religious themes, and these were some of his favorite stories. On February 3, he wrote about an avalanche in, of all places, Bethlehem.

Figure VII-17 Gordon's Text 2/3/83



AVALANCHE IN BETHLEHEM
There
was once a high mountain and over that high
mountain lived a little town called Bethlhem.
in one of the houses lived a lady and a boy
named Mary and Jesus. One day when Mary was
cooking she saw a bundle of snow falling from
the mountain Then Mary said "Jesus do some-
think" Jesus said "I will put a ring around the Erath
When Jesus put a ring arond the erath the sn-
ow just melted and all the pepole in Bethlhem
started to sing God is or Farther after they g-
ot thew singing they all said "God and the Sist-
ers are the sprit of Bethlhem."
The
END

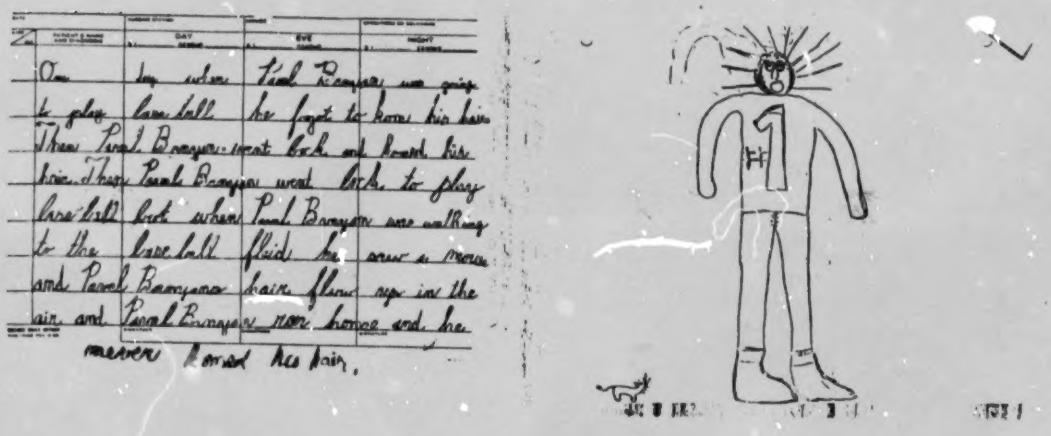
```
AVALANCHE IN BETHLEHEM
There was once a high mountain
and over that high mountain lived a little town called Bethlehem
   .
In one of the houses lived a lady and a boy named Mary and Jesus
   .
One day when Mary was cooking she saw a bundle of snow falling from
   the mountain .
Then Mary said , " Jesus , do something . "
Jesus said , " I will put a ring around the earth . "
when Jesus put a ring around the earth the snow just melted
and all the people in Bethlehem started to sing , " God is our Father
   . "
After they got through singing they all said , " God and the sisters
   are the spirit of Bethlehem . "
The End
```

When asked how he got the idea, he said that he had first thought of just writing an avalanche story but then got the idea of making it religious: "I was going to write a regular story, and then I thought about Jesus and Mary, and I just writed 'an avalanche,' and then I wrote it in Bethlehem." The story has the flavor of Sunday-school stories, but with Gordon's special touches, such as his unusual vocabulary choice in "a bundle of snow," and his very realistic piece of dialogue, "Jesus, do something."

Folktale

In February, Ms. Caldwell's class spent time reading and listening to tall tales about Paul Bunyan, John Henry, and other tall-tale heroes. Gordon decided to write about Paul Bunyan, and to draw a picture to get ideas for the story.

Figure VII-18 Gordon's Text and Picture 2/17/83



One day when Paul Bunyan was going
to play base ball he fogot to koam his hair
Then Paul Bunyan went back and koamd his
hair. Then Paul Bunyan went back to play
base ball but when Paul Bunyan was walking
to the base ball fleid he saw a mouse
and Paul Bunyans hair flew up in the
air and Paul Bunyan ran home and he
never komd his hair.

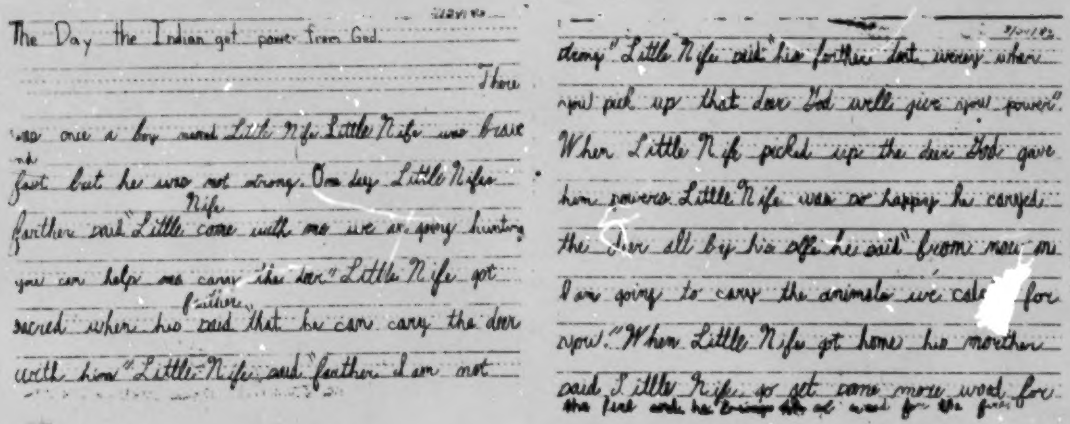
One day when Paul Bunyan was going to play baseball , he forgot to
comb his hair .
Then Paul Bunyan went back and combed his hair .
Then Paul Bunyan went back to play baseball .
But when Paul Bunyan was walking to the baseball field , he saw
a mouse ,
and Paul Bunyan's hair flew up in the air .
And Paul Bunyan ran home
and he never combed his hair .

At the beginning of the writing time, he works on his picture, talking with other children as he does so, and also stops from time to time to write the first few words of his story. (The researcher had discussed with him previously how he often starts his stories with ONE DAY. After writing the first word of this story, he comments, "I started with ONE again, huh?") Eventually he decides he's going to draw and write about Paul Bunyan being scared by a mouse. This Paul Bunyan story is different from the traditional ones; he's not a giant logger but a guy in jeans and a baseball shirt who gets scared by a mouse. Ms. Caldwell mentioned that the part about the mouse may have come from a story they read as a class, but the baseball part is original. Gordon liked this story a lot, because of the funniness of the hair flying up.

Integration of Themes

On March 24, Gordon wrote a story that integrates several of his interests.

Figure VII-19 Gordon's Text 3/24/83



The Day the Indian got powe from God.
There
was once a boy named Little Nife Little Nife was brave
and fast but he was not strong. One day Little Nifes
farther said "Little Nife come with me we are going hunting
you can help me carry the deer" Little Nife got
scared when his farther said that he can carry the deer
with him" Little Nife said "farther I am not
strong" Little Nife said his farther don't worry when
you pick up that deer God will give you power".
When Little Nife picked up the deer God gave
him powers Little Nife was so happy he carryed
the deer all by his self he said "from now on
I am going to carry the animals we cat[illegible] for
you." When Little Nife got home his mother
said Little Nife go get some more wood for
the fire and he bring lots of wood for the fire"

The Day the Indian Got Power from God
There was once a boy named Little Knife .
Little Knife was brave and fast
but he was not strong .
One day Little Knife's father said , " Little Knife , come with me .
We are going hunting .
You can help me carry the deer . "
Little Knife got scared when his father said that he could carry
the deer with him .
Little Knife said , " Father , I am not strong . "
" Little Knife , " said his father , " don't worry .
When you pick up that deer God will give you power . "
When Little Knife picked up the deer God gave him powers .
Little Knife was so happy he carried the deer all by himself .
He said , " From now on I am going to carry the animals we catch for
you . "
When Little Knife got home his mother said , " Little Knife , go get
some more wood for the fire . "
And he brought lots of wood for the fire .

This story draws elements from his identity as a Native American and his interest in religion. Gordon also has a very strong relationship with his father, which comes out in this story. He draws as well on a "storybook" conceptualization of Native Americans. Deer hunting is not a part of Papago culture, and Gordon took a moment to decide whether to call his character "Little Knife," "Little Fire," or "Little Fox," which are the kinds of Indian names often found in picture books. When asked how he got his idea for what to write about, he says "I thought about Indians, I was going to write about Indians, then I saw POWER <on the cover of a book that was lying on a nearby table>...and then I was thinking of God, so I put 'God' there." He seems to have decided on his general topic when he wrote the title and to have then developed the details as he went along. It is probably his most effective story, with a strong plot, a meaninful theme, and real character development. This story is a special favorite of Ms. Caldwell's. She comments, "I think this is one of the most neat stories I've ever read in my whole life...and not just because I'm a nun!" She finds it fascinating that someone as young as Gordon would come up with the idea of getting strength from God, and sees parallels with "the old Indian ways of...a dream and getting power from the dream, and once you have the power, you have the power to use." She also remarks that "he's using the power to be helpful; I thought that was really neat."

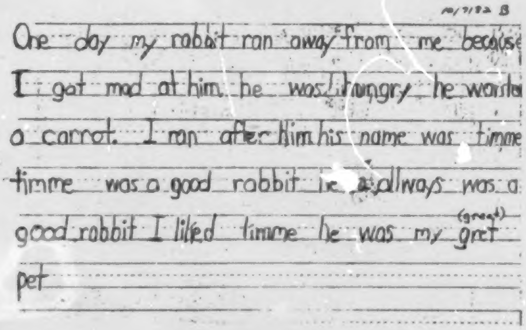
Summary

Gordon is clearly able to write about a large variety of topics, and to maintain a strong story sense through them all. Ms. Caldwell comments that he "seems to have a story line right from the beginning" of the year, and that he usually sticks to one topic: "He doesn't seem to just go to one thing and then skip and then come back like some kids do." When asked if he'll write different kinds of stories when he's older, like in sixth grade, Gordon says he'll write about buildings and skyscrapers then, and that when he was in first grade he wrote about sheep and plants. When asked what he mostly writes about this year, he replies "interesting stuff"; the reader of his stories is compelled to agree.

Syntax

An early story of Gordon's from Year II shows him operating at a relative simple syntactic level.

Figure VII-20 Gordon's Text 10/7/82



10/7/82 B

One day my rabbit ran away from me because
I got mad at him he was hungry he wante
a carrot. I ran after him his name was timme
timme was a good rabbit he allways was a
good rabbit I liked timme he was my gret (great)
pet

One day my rabbit ran away from me because I got mad at him .
He was hunury .
He wanted a carrot .
I ran after him .
His name was Timmy .
Timmy was a good rabbit .
He always was a good rabbit .
I liked Timmy .
He was my great pet .

It is made up of short T-units, with an average of only 5.33 words each. Only the first T-unit has more than one clause. However, later in the year, as the ideas Gordon expresses become more complex, he uses more sophisticated syntactic structures. The story about the avalanche in Bethlehem is a prime example. (See Figure VII-17) It has an average of 11.77 words per T-unit and 2.11 clauses per T-unit. Looking at some of the T-units involved shows what this complexity looks like.

> THERE WAS ONCE A HIGH MOUNTAIN, AND OVER THAT HIGH
> MOUNTAIN LIVED A LITTLE TOWN CALLED BETHLEHEM.

This sentence is made up of a simple one-clause T-unit followed by a complex one. The second T-unit is introduced by a prepositional phrase, and has a main clause with the subject and verb inverted, followed by a nominal clause modifying the subject. The repetition of the phrase HIGH MOUNTAIN and the subject-verb inversion produce a strongly literary effect.

> IN ONE OF THE HOUSES LIVED A LADY AND A BOY NAMED MARY AND JESUS.

This T-unit also has subject-verb inversion followed by a nominal clause. The compound nouns which pair up in the main clause subject and its modifier are a particularly sophisticated structure.

> ONE DAY WHEN MARY WAS COOKING SHE SAW A BUNDLE
> OF SNOW FALLING FROM THE MOUNTAIN.

A main clause (ONE DAY SHE SAW A BUNDLE OF SNOW) is modified by an adverbial one of time and a nominal one modifying the object BUNDLE OF SNOW. When Gordon is writing at this level of syntactic complexity, he is approaching the style of much older writers. both in the length of his sentences (12-grade writers average 14.4 words/T-unit and 1.68 clauses/T-unit - Hunt, 1970) and in the variety of syntactic structures he uses.

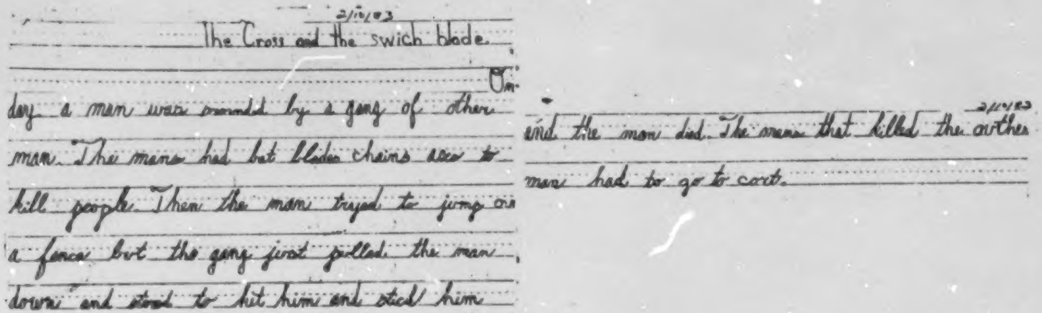
Orthography

Many aspects of Gordon's orthography have continued to develop during Year II of the study. This can be seen in his behavior as he writes and in the stories themselves.

Resource use

Gordon uses a variety of strategies for spelling words. When asked in interviews what he does when he doesn't know how to spell a word, his answers include: sound it out, look in the dictionary, look in your desk and see if you spelled it already <on another paper>, ask somebody, and figure it out. On February 10, Gordon consults the dictionary a good deal as he writes; a few examples show him revealing a lot about his spelling strategies in the process.

Figure VII-21 Gordon's Text 2/10/83



2/10/83

The Cross and the swich blade.

One day a man was srounded by a gang of other man. The mens had bat blades chains axes to kill people. Then the man tryed to jump ov a fence but the gang jest pulled the man down and stard to hit him and stick him

2/11/83

and the man died. The mens that killed the orther man had to go to cort.

The Cross and the Switchblade .
One day a man was surrounded by a gang of other men .
The men had bats , blades , chains and axes to kill people .
Then the man tried to jump over a fence ,
but the gang just pulled the man down and started to hit him and
stick him ,
and the man died .
The men that killed the other man had to go to court .

The first word he looks for is SURROUNDED; he comments, "I know how to spell it - it's S, R, ROUND, the E-D." He can't find it and decides to just write it that way, but then gets an easy dictionary to confirm the spelling of ROUND. Next he gets a harder dictionary to look for GANG. His search strategy isn't very systematic once he has found the initial letter. Although he is able to figure out what the second and third letters are likely to be, he doesn't use this information to direct his search. After he finds GANG, he copies it down, then makes a note of the page number it's on in case he needs the word again. When the researcher kids him about this, he realizes that he doesn't need the page number now that he has the word. He is sensitive about which dictionary is likely to have the words he is looking for, using a harder dictionary for GANG and SURROUNDED and an easy picture one for STICK. Gordon is not yet fully proficient in all the skills a dictionary user needs to have, but he is well under way; his ownership of the process and eagerness to learn more are a big part of this.

Knowledge and attitudes about spelling

Gordon mentions in an April interview that he tries to spell all words correctly if possible. He reveals that there are two ways for him to know a word is misspelled when he rereads a story. They may be words that he remembers not taking the time to spell accurately, "if I just wrote it any way, any kind of letters"; or he may pick it up from applying orthographic knowledge as he re-reads: "if it sounds right then you know it's spelled right...or <if it> looks right." Gordon continues to see spelling as important not intrinsically but as a means to success. He says that if you are "police ladies or men, you have to write nice so they can understand" and that spelling is especially important if you're a teacher. A sign painter has to spell correctly "because if they don't they might not even get hardly any money." (He may be implying that a store's sign must be legible in order to draw customers.) Spelling is important for children for "your report card." However, his motivation for correct spelling in his own writing certainly doesn't seem to be report card oriented; his focus seems to be a more general one of doing the best work that he can.

Invented spellings

As in Year I, one can get a feel for Gordon's linguistic knowledge by looking at the variety of invented spellings he uses. Examples will be chosen from 2 stories which have a variety of them, THE CROSS AND THE SWITCHBLADE (see Figure VII-21) and the story about LITTLE KNIFE (see Figure VII-19).

One can see the following processes going on in his spellings: (It should be noted that these are suggested influences, not an attempt to categorize each spelling.)

Phonetic:
cort/court
nife/knife
stared/started
srounded/surrounded
swich blade/ switchblade

For some of these words (COURT, KNIFE, SWITCHBLADE), Gordon's spelling is a more direct phonetic representation of the word than the standard spelling is. In SURROUNDED, the reduced vowel in the first syllable has been eliminated. STARTED may represent an influence from Papago dialect, where stops may be replaced by a glottal stop, which is not represented by any letter in English orthography.

Orthographic/Morphemic Patterns:
axs/axes
tryed/tried
caryed/carried
mouther/mother
outher/other

In these spellings, Gordon does not fully control patterns for adding morphemic affixes and for alternative spellings of certain phonemes. (his spellings of MOTHER and OTHER may involve an analogy with the vowel spellings in words like TOUCH and ROUGH.)

Real-word substitution:
farther/father
werey/worry

Gordon's spelling of FATHER is a real word; in his spelling of WORRY, he appears to be writing WERE and adding a Y as a final marker.

Punctuational
dont/don't
his slfe/himself
swich blade/switchblade

As in Year I, Gordon doesn't fully control apostrophe use and one word/two word patterns.

Punctuation

Gordon for the most part controls sentence-boundary punctuation. During Year II he began to be aware of and to use other forms of punctuation as well. The two most important are the hyphen and quotation marks. Gordon was very proud one day to show the researcher that he knew how to use a hyphen when he runs out of room at the end of a line; he mentioned that his sister had taught it to him. AVALANCHE IN BETHLEHEM (Figure VII-17) has several examples of it. Interestingly, he hyphenates one-syllable words whenever he runs out of room, but the two-syllable words at the syllable boundary, even though in the case of SOMETHING he has plenty of room to fit more letters in. He is not able to articulate why he does this, which suggests that his knowledge about hyphen use is tacit as well as explicit. In his Christmas story (see Figure VII-16), he uses a hyphen in the middle of the word CUP-CAKES because "they go together." The week previously he had put a small space between the two parts of FOOTBALL for the same reason; when questioned, he says that either option is allowable.

Gordon began to use quotation marks quite a bit in Year II; Ms. Caldwell mentions in an interview that she told him about them when he began to use dialogue a lot, and that when he remembers, he usually includes them. The story about Little Knife (Figure VII-19) has an interesting example that shows how he conceptualizes quotation marks. One of his sentences is punctuated as follows (spelling has been conventionalized):

> LITTLE KNIFE SAID, "HIS FATHER DON'T WORRY
> WHEN YOU PICK UP THAT DEER GOD WILL GIVE YOU POWER.

What he really intended was:

> "LITTLE KNIFE," SAID HIS FATHER," DON'T WORRY.
> WHEN YOU PICK UP THAT DEER GOD WILL GIVE YOU POWER.

In an interview, Gordon made it clear what strategy he is following. The first quotation mark goes after SAID; the second goes after the person is done talking. This serves him surprisingly well in most cases, except for the rarer divided quotations like the one above.

Table VII-8 Words per Story: Gordon Year II

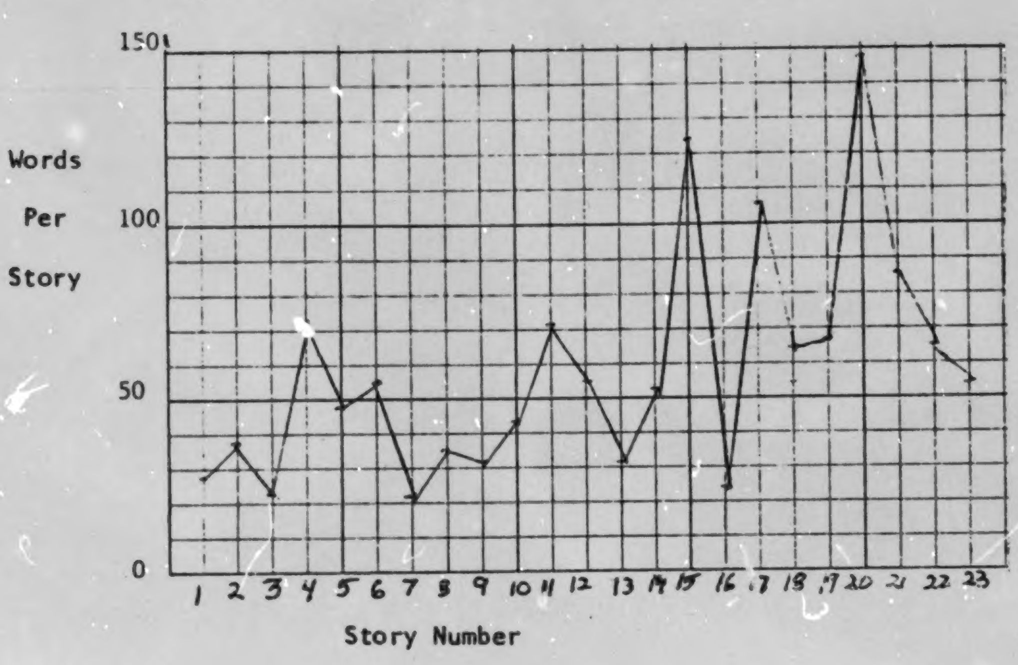


Table VII-9 Words per T-Unit: Gordon Year II

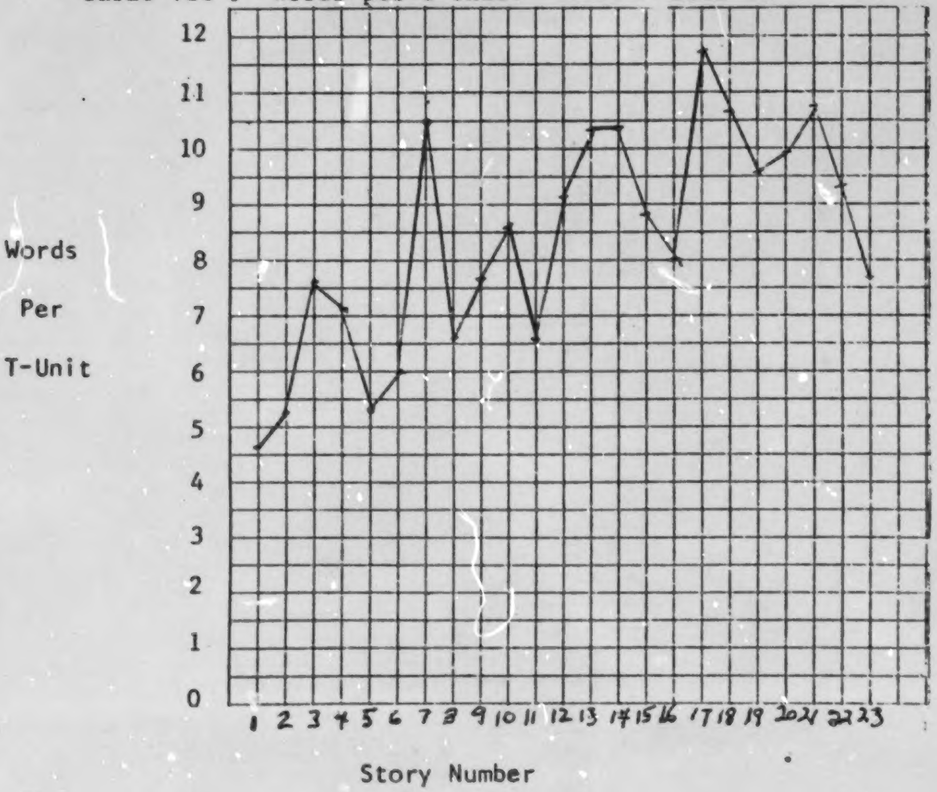


Table VII-10 Clauses per T-Unit: Gordon. Year II

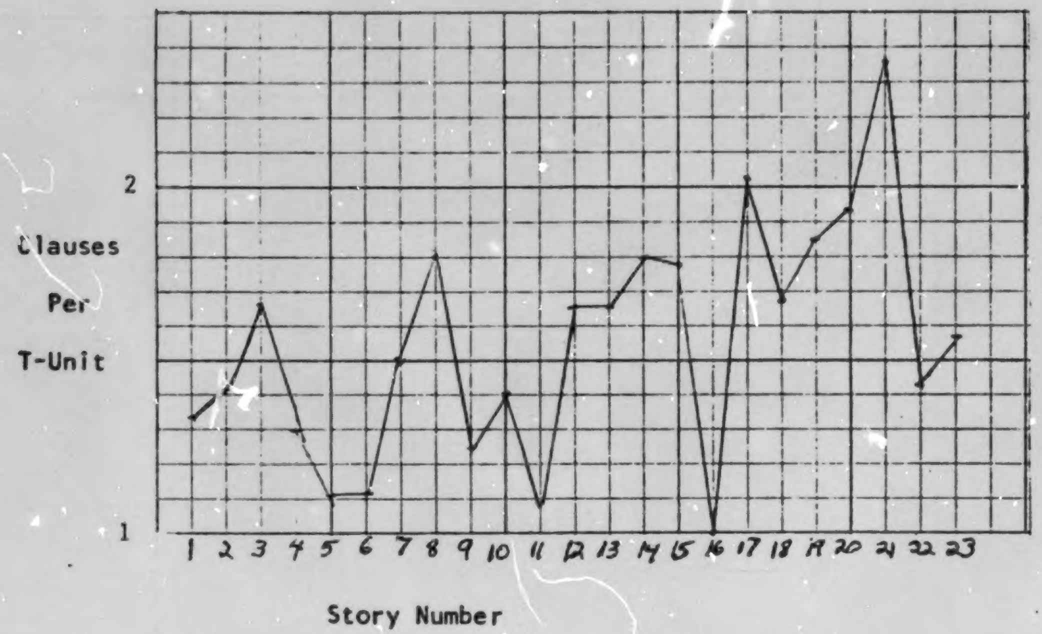


Table VII-11 Percent Conventional Spelling: Gordon. Year II

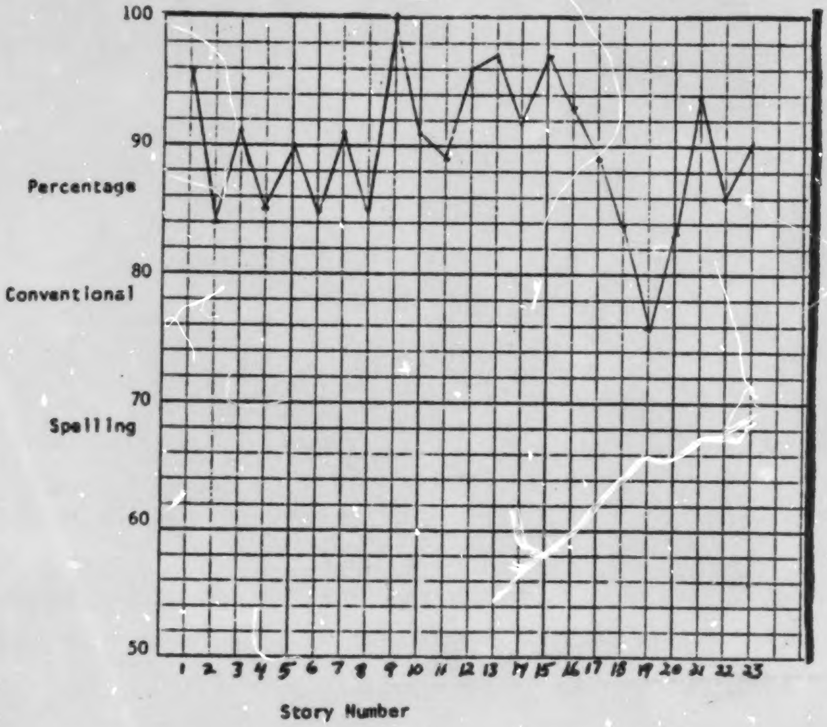


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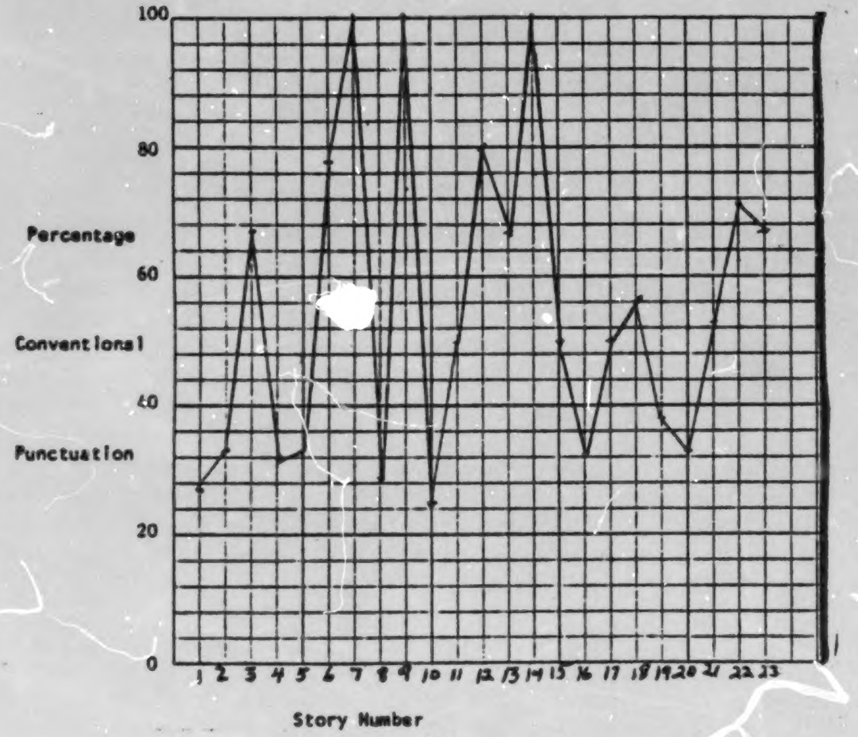
Table VII-12 Percent Conventional Punctuation: Gordon Year II



Developmental Trends: Year II

As in Year I, quantifiable aspects of Gordon's development show a variable pattern, as illustrated in Tables VII-8 through VII-12. Patterns of change from the first half to the second half of Year II are illustrated and compared to Year I in Table VII-13.

Table VII-13 Gordon Year II: First and Second Half

	First Half	Second Half	Overall	Year I
Words Per Story	42.0	73.1	58.2	37.6
Words Per T-unit	6.5	9.74	8.31	8.84
Clauses Per T-unit	1.29	1.81	1.58	1.61
Percent Conventional Spelling	88.9	89.2	89.06	79.4
Percent Conventional Punctuation	42.1	48.9	46.1	35.0

In the first three measures above, Gordon shows dramatic changes from the first to the second half of the year. His stories in the first half of the year are not much longer than those he wrote in third grade, but in the second half of the year most stories are 50 words or longer. In both words per T-unit and clauses per T-unit Gordon's averages are lower than in Year I, but both show an upward trend from the first to the second half of the year. The uncharacteristically low figures for the first half of Year II may reflect assignment constraints; writing four sentences about pictures may have resulted in less complex structures than the broader scope of more fully unassigned writing found later. By the second half of the year, Gordon has hit his stride; most of his stories have more than 9 words per T-unit and more than 1.5 clauses per T-unit.

Gordon's percentage of conventional spelling is high for all stories, dropping below 80% only once, and is similar in the first and second halves of the year. The 20 words Gordon uses most frequently, which make up 40.4% of his total words, are always conventionally spelled. Gordon's percentage of conventional punctuation varies from 25% to 100% but improves thoughout the year and is on the average higher than in third grade. Table VII-14 shows that he omits periods sometimes and commas often, and has partial control of quotation marks. (Many of the omitted commas are those that obligatorily precede quotation marks.)

Over the two years of the study, Gordon has shown both his ability to express himself through writing and his active interest in gaining control over the linguistic systems of written language. An observer's impressions of the lively inquiring nature of his mind is confirmed by the stories themselves and the quantifiable summary data derived from them.

CHAPTER VIII - ELAINE

by Sandra Wilde

Introduction

Elaine is a sociable and affectionate child who enjoys the social interaction of school. She relished the personal attention she got from the writing project researchers and as a result was always eager to work with us. Elaine lives with her mother, one older sister, and two younger brothers, a small-to-average-sized family in the Papago community. Her mother is a secretary at the school district office, which is located close enough that Elaine can (and does) visit with her during the school day. Elaine's first language is English, but she also understands a limited amount of Papago. Her mother stated that she can speak a few individual words of Papago, but can't speak whole sentences or carry on a conversation. Elaine doesn't read much at home but does a fair amount of writing; during the first year of the study most of her home writing was notes to her mother and sister, but by the second year she wrote stories at home too. Her involvement in writing at home is shown by the fact that she gets annoyed when she can't find a pencil or her little brother interrupts her. Elaine's mother enjoys her writing and is happy with her progress.

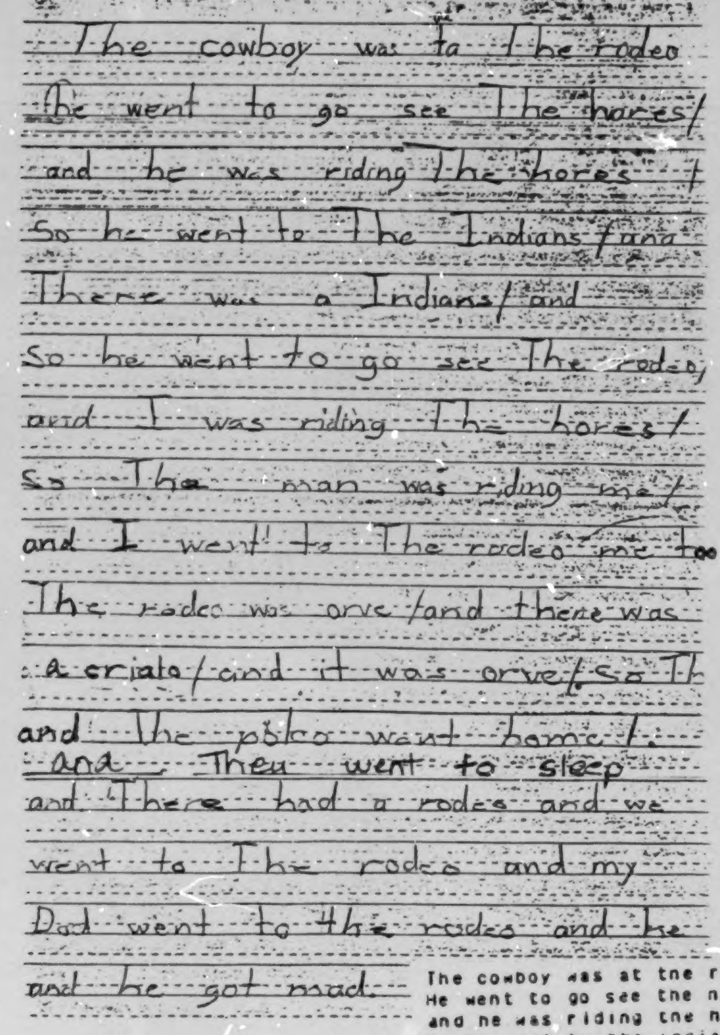
As a student, Elaine was selected to represent the lower third of our subjects developmentally. Her year in third grade was of mixed success for her. Ms. Howard did see her as making progress to some extent, but also disciplined her for cheating and other misbehavior several times. Elaine in turn was somewhat lacking in self-confidence and felt that she would be considered to be cheating no matter what she did. At the end of 3rd grade, Ms. Howard decided that Elaine should go to the school's new pre-fourth-grade class rather than regular fourth grade. At the beginning of Year II of the study, her mother placed her in a private "back-to-basics" school in the area. We thought we had lost her as a subject in the study, but in early November she appeared in the pre-fourth-grade class and remained the rest of the year. (Elaine's mother didn't volunteer any information as to either why she had enrolled her or why she had taken her out of the back-to-basics school.) After a brief period of social re-adjustment, Elaine had a good year in Ms. Caldwell's class. Her confidence increased and she progressed in academics.

Year I

Writing Process: November, Year 1

Elaine's first four stories from Year I of the study are characterized by a certain amount of involvement in the task but limited involvement with her topics. Three of these stories are cowboy stories, which the class was asked to write as part of a unit on the rodeo.

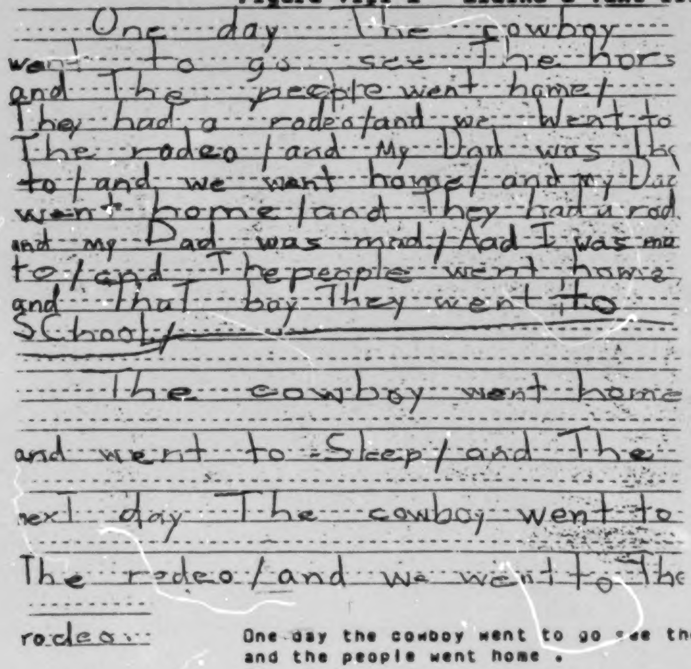
Figure VIII-1 - Elaine's Text 11/3/82


The cowboy was ta The rodeo
he went to go see The hores/
and he was riding The hores /
So he went to The Indians/and
There was a Indians/and
So he went to go see The rodeo,
and I was riding The hores/
So The man was riding me/
and I went to The rodeo me too
The rodeo was orve/and there was
a criato/and it was orve/so Th
and The pōleo went home/.
and They went to sleep
and There had a rodeo and we
went to The rodeo and my
Dad went to the rodeo and he
and he got mad.

The cowboy was at the rodeo .
He went to go see the horses
and he was riding the horses .
So he went to the Indians
and there was an Indian .
And so he went to go see the rodeo .
And I was riding the horses .
So the man was riding me .
And I went to the rodeo , me too .
The rodeo was over .
And there was a carnival
and it was over ,
and the people went home
and they went to sleep .
And they had a rodeo
and we went to the rodeo .
And my Dad went to the rodeo
and he got mad .

Elaine's writing of this first piece began with an awareness of external constraints; she asked a neighbor, "Do we have to write a cowboy story?" After writing 3 words she felt she didn't know what to say. The researcher asked her what cowboys might do, and after that point she expressed no further difficulty with topic development. The main aspects of her writing process apparent to an observer were those relating more to form then to content. When talking about what cowboys do, she decided to say that the cowboy was riding a horse. When the researcher wouldn't tell her how to spell "riding," she was reluctant to invent a spelling. Finally she said "The cowboy is at the rodeo. I know how to spell rodeo - r-o-d-e-o." Her concern for form thus influenced her content. Interestingly, a few lines later, she says "I know how to spell riding - "r-i-d-i-n-g," and writes it successfully. Throughout the story she shows a concern for spelling, looking up words on a wall chart, saying /k / in an attempt to sound out "carnival," and even looking at a story written the previous week to see how she'd spelled "mad." She also shows her concern for form by making changes solely for neatness in her text. At 104 words, this story is Elaine's second longest for the year. However, it is the observer's impression that the length is related to her attempts to impress and interact with the researcher rather than to a particular interest in the topic. The first few times we worked with Elaine, we were using a version of the manual observation form where we numbered each word the child used; she was very aware of this and was thrilled when her word count was high, particularly if it was over 100. When the novelty of being observed had faded a little, her story length dropped off to around 50 words most days, which was more typical of her writing before the study began.

Figure VIII-2 - Elaine's Text 11/5/81



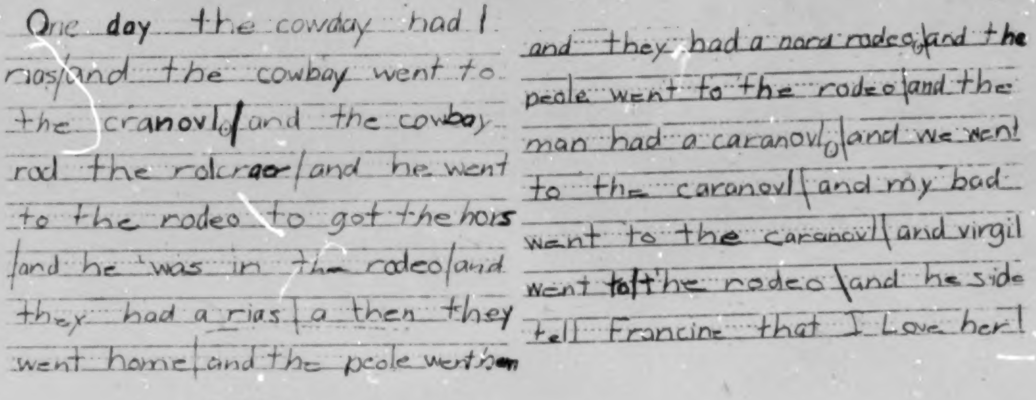
One day The cowboy
went to go see The hors
and The people went home/
They had a rodeo/and we went to
The rodeo/and My Dad was The
to/and we went home/and my Dad
went home/and They had a rod
and my Dad was mad/Aad I was ma
to/and The people went home
and That day They went to
School/

The cowboy went home
and went to Sleep/and The
next day The cowboy went to
The rodeo/and we went to The
rodeo

One day the cowboy went to go see the horse
and the people went home .
They had a rodeo
and we went to the rodeo
and my Dad was there , too .
And we went home
and my Dad went home .
And they had a rodeo
and my Dad went home .
And they had a rodeo
and my Dad was mad .
And I was mad , too .
And the people went home .
And that day they went to school .
The cowboy went home and went to sleep .
And the next day the cowboy went to the rodeo
and we went to the rodeo .

Elaine began on November 5 by saying, "let's see - what will I write?", and then moved quickly into writing. Again, most of her verbal interaction related to the form rather than the content of the piece; most obviously, on 7 occasions she asked her neighbor Franny how to spell words. (Franny finally ignored her.) When she was done writing, she commented proudly on the fact that she had written 5 stories that week. (Ms. Howard expected the students to write 3 to 5 stories a week at this point in the year.) She didn't discuss the content of her story at all.

Figure VIII-3 - Elaine's Text - 11/10/81

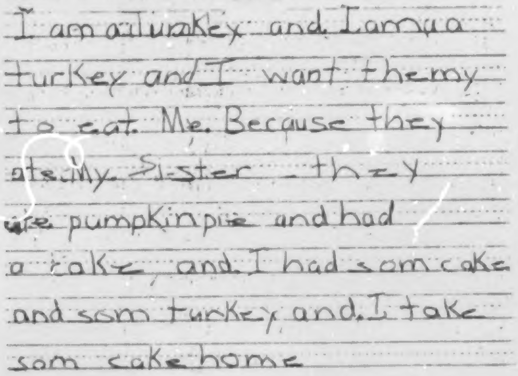


One day the cowday had I
rias/and the cowbay went to
the cranovl/and the cowbay
rod the rolcrar/and he went
to the rodeo to got the hors
/and he was in th rodeo/and
they had a rias/a then they
went home/and the peole went hom
and they had a nord rodeo/and the
peole went to the rodeo/and the
man had a caranovl/and we went
to th caranovl/and my bad
went to the caranovl/and virgil
went ~~to~~ the rodeo/and he side
tell Francine that I Love her!

One day the cowboy had a race .
And the cowboy went to the carnival
and the cowboy rode the roller coaster .
And he went to the rodeo to get the horse .
And he was in the rodeo
and they had a race .
And then they went home
and the people went home
and they had another rodeo .
And the people went to the rodeo .
And the man had a carnival .
And we went to the carnival
and my dad went to the carnival .
And Virgil went to the rodeo
and he said , " Tell Francine that I love her . "

November 10 is a day when the class was louder than usual; Elaine was involved in a fair amount of social interaction. She asked Franny for spellings 6 times and also tried out spellings on her twice ("Do you spell 'then' t-h-e-n?") Also she asked Daniel how to spell a word, Vincent asked her how to spell one, and Gary interrupted her writing by telling the group that some clowns would be coming into the room later. Elaine stopped writing in order to reread a little more often than usual; perhaps the noise level made it harder to keep up her train of thought. Again, her only comment related to content was at the beginning. After writing "One day," she looked at one of the cowboy pictures her teacher had provided for story starters, said, "I know what to write," and proceeded.

Figure VIII-4 - Elaine's Text 11/24/81


I am a Turkey and I am a a
turkey and I want themy
to eat Me. Because they
ate My Sister they
ate pumpkin pie and had
a cake, and I had som cake
and som turkey and I take
som cake home

I am a turkey
and I am a turkey .
And I want them to eat me because they ate my sister .
They ate pumpkin pie and had a cake .
And I had some cake and some turkey
and I took some cake home .

By November 24, Ms. Howard's class had finished writing cowboy stories and was writing about Thanksgiving. Elaine has chosen the assignment "If I were a turkey." This again was a day when much of the class was restless - it was just before the Thanksgiving break, the room was hot, and the children seemed somewhat bored with what they were writing about. There were some brief interruptions in Elaine's writing - sonic booms outdoors and members of her small group singing, "Uh-O-Spaghetti-O's." This is Elaine's shortest story to date, which may be related to this restless atmosphere. As usual, Elaine's observable behavior is related to form rather than content. She continues to ask Franny how to spell words, but also asks other people and shows an increasing use of word charts in the room as a spelling resource. She also makes comments that reflect an increasing self-monitoring of spelling. She notices she'd written "my" for "me" (but doesn't change it at first), notices and changes "pin" for "pie," and, after writing "themy," for "them," says "Is that how you spell 'them'? Like 'they'?" Her one revision of content is influenced by an interaction with the researcher. She asks how to spell "some," staples her pencil, then re-reads her story, which at this point read "I am a Turkey and. I am a turkey and I want themy to eat. My. Because they ate Me. Because they ate" The researcher asks if it makes sense, and Elaine says "no" and decides to change "My" to "Me" and to change the second "Because" to "Brother," but changes her mind and writes "Sister." She then continues not with the "some" she'd originally asked for but with "pumpkin pie."

Elaine's first Writing Concepts interview, which was conducted just before these stories were written, reveals attitudes that are consistent with her writing process as we observed it, generally showing more awareness of form and external constraints then of the construction of meaning. She feels that good writers are those who have been taught and poor writers are those who didn't learn. She says that the first thing she does when she writes is to decide what to write about and that she then writes it down; a piece of writing ends "when you're getting tired or when you want to <stop>." She feels that there is nothing you need to know to be a good writer, and that in two years her writing will be different because she'll use cursive and write with her right hand. (She's left-handed.)

Stories: November, Year I

None of the stories from this group are particularly strong as stories. (They were given mostly scores of "1" (out of 4) on our narrative scale.) The 3 cowboy stories are very similar - lists of events with little plot or emotional tone. They all begin with "the cowboy" doing something, but all go on to talk about "the people," "my dad," and "I" or "we." A rodeo and carnival is an annual event in the Papago community, so that this content could be described as either personal narrative or very realistic fiction. The events are episodic and somewhat disjointed, with sequence and relationships unclear, but a lot of people going to the rodeo, doing something there, and then going home.

The last sentence of the November 10 story injects a variety of teasing often found in classroom writing at this age. To juxtapose a boy's name, a girl's name (in this case both seatmates), and the word "love" in any story is always a good attention-getter. (Note that this occurred on a day with a great deal of restlessness and interaction.) The turkey story is interesting for its switch in point of view. The previous week, Ms. Howard had spent some time talking with the class about writing in the first person, in relation to an assignment where they were asked to write diaries of pilgrims on the Mayflower. Most of the children had difficulty staying in character, which is also true of Elaine here. She writes a few lines as the turkey, switches to talking about an undefined "they," and when she returns to the first person it is clearly as herself, with turkey returned to its usual objectified status.

Elaine's syntax in these four stories is unremarkable. She uses few subordinate clauses, and her phrases mostly consist of a simple noun, a verb, and either an adverb ("home"), another noun ("a rodeo"), or a prepositional phrase ("to the carnival"). The turkey story is somewhat more varied syntactically and has the second highest number of words per T-unit that year. The first story includes a maze ("so the and the people went home") which is the result of an incomplete revision. Elaine had written "There was a carnival and it was over so the carnival was," and decided to erase the last 2 words before going on, because they were repetitive; she never re-read and caught the maze.

Elaine's attention to orthography is reflected in her percentages of conventional spelling, which range from 84 to 97%. Her invented spellings often involve:

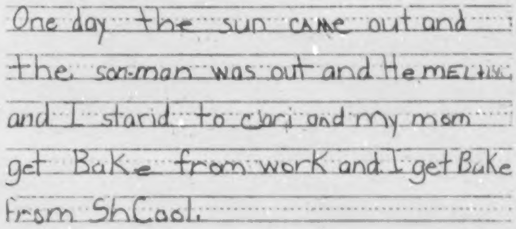
reversals	at/ta, horse/hores, over/orve.
o as an end marker	carnival/crialo, people/poleo, sleep/splo
real word substitutions	too/to, they/there, took/take, rode/rod, said/side

She reverses letters only twice: the "b" in cowboy and the first "d" in dad. She has an interesting pattern with capitalization - in the first 2 stories she unconventionally capitalizes 26 words which are common sentence beginners, such as "The." Most of her omitted capitals are because she did not mark sentence boundaries, so that periods were omitted also. Her use of periods changes dramatically during this time period. In the first 3 stories, she omits virtually all necessary periods. In the fourth story, she uses 6 periods, but all unconventionally. She appears to have developed a rule that periods precede capitals, which is where all the periods occur in the story (although not all capitals are preceded by periods). It is likely that this rule is related to instruction, although we have no actual evidence of this. The rule is at this point unconnected to any notion of marking sentence boundaries with both periods and capitals, but is used with words like "I" which are capitalized wherever they appear and with words like "Me" which Elaine capitalizes inappropriately. Elaine's control of sentence boundary punctuation undergoes, as we shall see, considerable development over the course of the study.

Writing Process: December through February, Year I

Elaine's next group of 5 stories is largely characterized by less social interaction and more uninterrupted writing then in her first group. Her stories have settled down to a shorter length of 30-50 words. (Her mean for the year is 56.8 words.) Although the vast majority of our writing samples are first drafts, two from this group are re-copyings of stories that Elaine and the teacher had edited together.

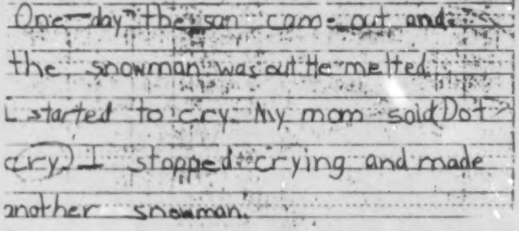
Figure VIII-5 - Elaine's Text 12/3/81



One day the sun CAME out and
the son-man was out and He MELtid
and I starid to cri and My mom
get BaKe from work and I get BuKe
from ShCool.

One day the sun came out
and the snowman was out .
And he melted .
And I started to cry
and my mom got back from work .
And I got back from school .

Figure VIII-6 - Elaine's Text 12/10/81

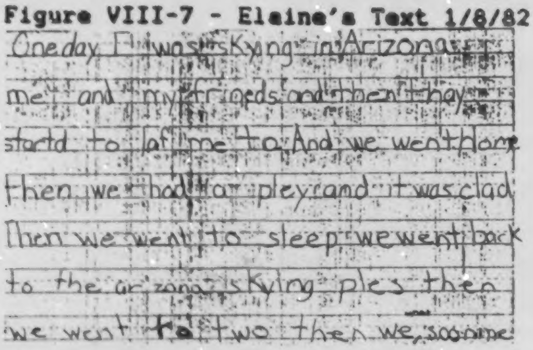


One day the sun came out and
the snowman was out He melted.
I started to cry. My mom said Dot
cry. I stopped crying and made
another snowman.

One day the sun came out
and the snowman was out .
He melted .
I started to cry .
My mom said , " Don't cry . "
I stopped crying and made another snowman .

On December 3, Elaine looked at a list of Christmas story topics and chose to write about a snowman. The story starter read, "The sun came out. Frosty is melting. How are you going to save him?" This story, at 32 words, is one of her shortest of the year; much of her time during this writing period is taken up by what we called "interruptions" - behavior which bears no apparent relation to the writing itself. We counted 9 of these interruptions, or one every few words. They consisted of such activities as playing with her paper, yawning, rubbing her face, talking to friends, and looking at and discussing the video camera which was filming a classmate. On December 10, when she was copying over rather than composing, her attention was more focused. After sharpening her pencil twice at the beginning, she continued with minimal interruption. (The differences in the content of these two stories will be discussed below.)

Figure VIII-7 - Elaine's Text 1/8/82

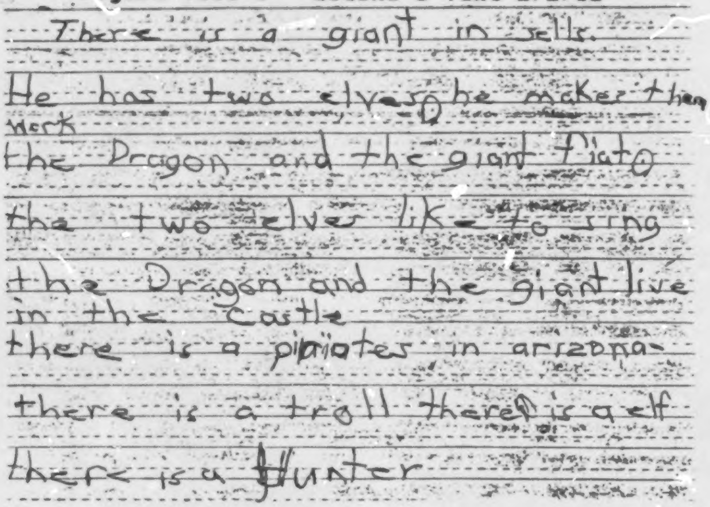


One day I was sKying in Arizona
me and my frineds and then they
startd to laf me to. And we went Home
then we had a pley and it was clad
Then we went to sleep we went back
to the arizona sKying ples then
we went to two then we [illegible]

One day I was skiing in Arizona , me and my friends .
And then they started to laugh .
Me , too .
And we went home .
Then we had a play . And it was cold .
Then we went to sleep .
We went back to the Arizona skiing place .
Then we went to town .
Then we went home .

In January the students began a unit on Arizona. They eventually moved on to expository, research-based writing, but were asked at the beginning to write in response to pictures. We observed Elaine during her writing of the last two-thirds of this story. She was absorbed in what she was doing and didn't talk at all. The only behaviors we observed were 2 small revisions (to start "Home" with a capital and to write a word more neatly), one look at the picture stimulus, stopping to think once, and re-reading a few words once. She no longer stops to ask people how to spell words but chooses to invent spellings. We do not know whether this change was self-initiated or teacher-suggested.

Figure VIII-8 - Elaine's Text 2/2/82

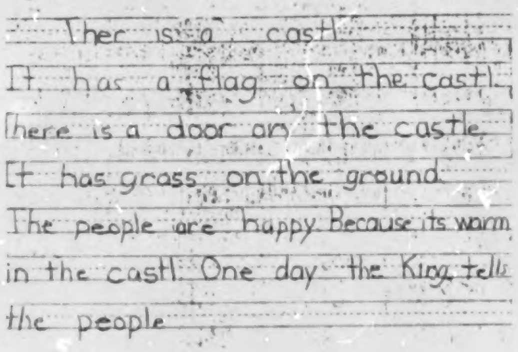


There is a giant in sells.
He has two elves he makes them work
the Dragon and the giant fiato
the two elves like to sing
the Dragon and the giant live in the castle
there is a piriates in arrzona
there is a troll there is a elf
there is a Hunter

There is a giant in Sells .
He has two elves .
He makes them work .
The dragon and the giant fight .
The two elves like to sing .
The dragon and the giant live in the castle .
There is a pirate in Arizona .
There is a troll .
There is an elf .
There is a hunter .

Our next observation of Elaine was in February, after the research unit was over and the children had begun writing fairy tales. There was a bulletin board in the writing center which described the meaning of setting, plot, and characters. We can assume from what we know of Ms. Howard's teaching style that there had probably also been whole-class instruction about these points. On reading over the manual observation form connected with this story, one gets the feeling that Elaine picks up steam as she goes along. Early in the story she stops and thinks every line or so but in the last five lines does so only once, stopping only to look at the bulletin board for the spellings of "pirate" and "hunter," and to make minor revisions. (Note that although she checked the spelling of "pirate," she was not completely successful in revising her original spelling, which appears to have been "piaiates." When she looked at the bulletin board she said, "Oh!", and changed the first "a" to an "r".)

Figure VIII-9 Elaine's Text 2/4/82


Ther is a castl
It has a flag on the castl
There is a door on the castle.
It has grass on the ground
The people are happy. Because its warm
in the castl. One day the King tells
the people

There is a castle .
It has a flag on the castle .
It has grass on the ground .
The people are happy because it's warm in the castle .

The story above also a fairy tale, is a recopying of a story Elaine had written earlier. The only behaviors observed were 2 short pauses to think.

Elaine's first periodic interview about her stories took place during this period, on December 8. In addition to her specific comments about individual stories, she reveals in a general way her explicit knowledge about the composing process. When asked why she likes certain stories and chooses them as her best, she tends to respond "I don't know," to like a story because of the content (e.g., it's a good story because she likes to eat turkey), or to read a specific line without saying why it makes the story good. She is unable to say why she prefers some stories less. When asked how her teacher would evaluate the same stories, she says that Ms. Howard would like one story because "she likes turkey," but other than that focuses on formal attributes like punctuation, handwriting, and story length.

Stories: December through February, Year I

The contrast between Elaine's two snowman stories is interesting. Her first draft (December 3) was scored low in all areas on our narrative scale. It follows the pattern we have seen before, of changing from a third-person narrative to a first-person one about herself. The sentence "I started to cry" is a bridge between the first part about the snowman and the second part, which is a piece of a "day-in-the-life"-type narrative. In the revised version, which received mostly scores of 3 (out of 4) on our narrative scale, the last two sentences have been changed so that the story holds together as a single narrative with an appropriate, satisfying conclusion. Elaine herself ranked this story as her favorite in a group of 3. We did not observe the editing process with this story so cannot describe how this change came about. However, based on our observations of other editing sessions, the change may or may not be Elaine's idea. Ms. Howard, in working on editing with individual students, often had goals in mind of what the final product should look like in terms of form and (to some extent) content. She therefore often made strong suggestions as to what changes should be made. The editing of stories for recopying was almost always done in conjunction with the teacher, rather than primarily by the student with some teacher input. (The story from February 16 discussed below provides a partial illustration of this process.)

Elaine's skiing story from January 8 shows her usual personalization of topic; from a picture of skiers in Arizona she writes a story about herself and friends which is only peripherally about skiing, which is one in a list of unconnected activities. Elaine was not particularly impressed with this story herself, ranking it third in a group of three. Ms. Howard ranked it second in a group of seven, but comments that it "mostly just lists the things that they did." Elaine's February 2 story about a giant is her first story we observed that is consistently in the third person. There is a bit of character development and she seems to have been particularly captivated by the variety of characters that occur in fairy tales, naming seven different ones. Her February 4 story, which is an incomplete beginning to a fairy tale, also remains in the third person and has more of a "story feel" to it than much of her previous work. Perhaps the fairy tale genre, being familiar to children, is easier for Elaine to work with than some other assigned topics have been.

Elaine's syntax in these 5 stories shows no unusual patterns. Her spelling shows examples of the following patterns:

reversals - shcool/school, son-man/snowman, frineds/friends

real word substitutions - bake/back, clad/cold, two/town, to/too

variations in past tense morpheme - melt/melted, starid/started, startd/started

phonetic - ples/place, laf/laugh

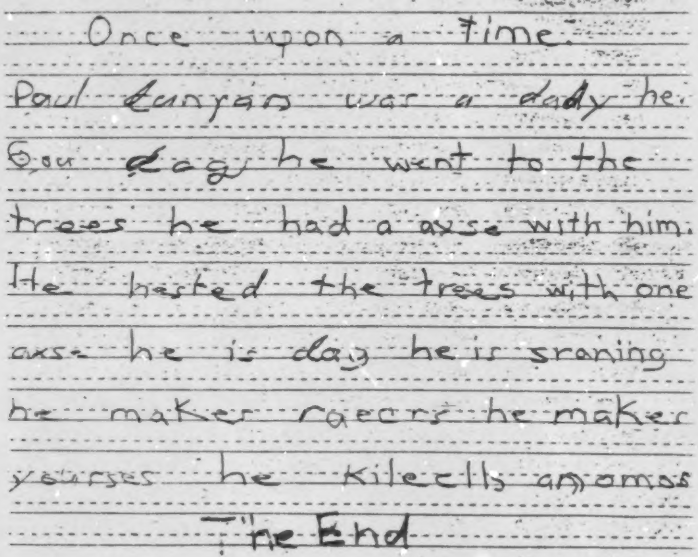
She is no longer using "o" as an end-of-word marker as she did in her first stories, but does use "i" once, in "ciari" (cry). Her one very unusual spelling, "soonme" for "home," was added after the observation period. Since her original version was the correct spelling of "home", "soonme" may be an invented spelling for another word such as "swimming." Although she is no longer constantly asking her neighbors how to spell words, her percentage of conventional spellings remains high, although the two edited versions almost certainly involved some teacher originated changes to the spelling. Elaine's punctuation is about two-thirds conventional on the two copied-over stories. This can almost certainly be attributed to teacher help since it is so different from Elaine's usual punctuation. In her three first-draft stories, Elaine omits most necessary periods and inserts periods before most capital letters, following the rule she apparently developed in

November about periods and capitals going together. Her capitalization problems are primarily failure to capitalize at the sentence boundaries where periods were omitted (18 instances - in the 3 first-draft stories only). She also fails to capitalize two place-names and inappropriately capitalizes 3 nouns, all starting with "h" (Ha, Hunter, Home). She has no reversals in this group of stories.

Writing Process: February and March, Year I

In Elaine's next group of stories from the first year, she appears to have found topics of some what more interest to her. There is no change in the extent of topic constraint assigned by Ms. Howard - the children were still given theme-related story starters and expected to produce a certain number of stories each week. However, the topics assigned during this period were, like the fairy tales earlier in February, relatively accessible to Elaine; they therefore allowed for some new kinds of development.

Figure VIII-10 - Elaine's Text 2/16/82



Once upon a time.
Paul bunyan was a dady he.
Gou dag he went to the
trees he had a axse with him.
He basted the trees with one
axse he is dag he is sraning
he maker raecrs he maker
yoursses he kilectls anamos
The End

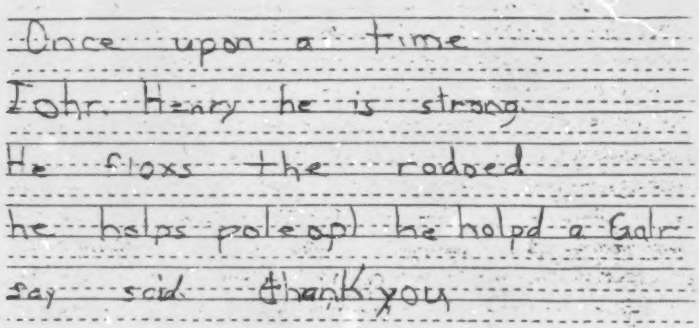
Once upon a time , Paul Bunyan was a baby .
He grew big .
He went to the trees .
He had an ax with him .
He had chopped the trees with one ax .
He is big .
He is strong .
He makes earthquakes .
He makes waves .
He kills animals .
The End

During the week of February 15-19, the class was doing a unit on tall tales. Ms. Howard discussed Paul Bunyan and other tall tale characters with the class and put up pictures of them on posters where the student's stories would eventually be hung. The writing center this week also included a poster containing a fairly elaborate story starter:

TALL TALE
CHAPTERS
1. Tell about your HERO
    a. Tell what he's "best" at
    b. Tell where he comes from
    c. Tell what he is like
2. Tell about an adventure he had
    a. Tell how it starts
    b. Tell what the problem is
    c. Tell how he solves it using what he is "best" at
3. Tell what your HERO is going to do now that this adventure is over.

On the blackboard there was a list of superlative words such as "kindest," "goofiest," "stinkiest," headed "TALL TALE HEROES ARE THE BIGGEST AND THE BEST." (The words included suggest that this list was probably generated as a class activity). Elaine wrote this story rapidly with few pauses - we observed only 3 behaviors, all task-related. (An edited version of this story will be illustrated and discussed below.)

Figure VIII-11 - Elaine's Text 2/18/82

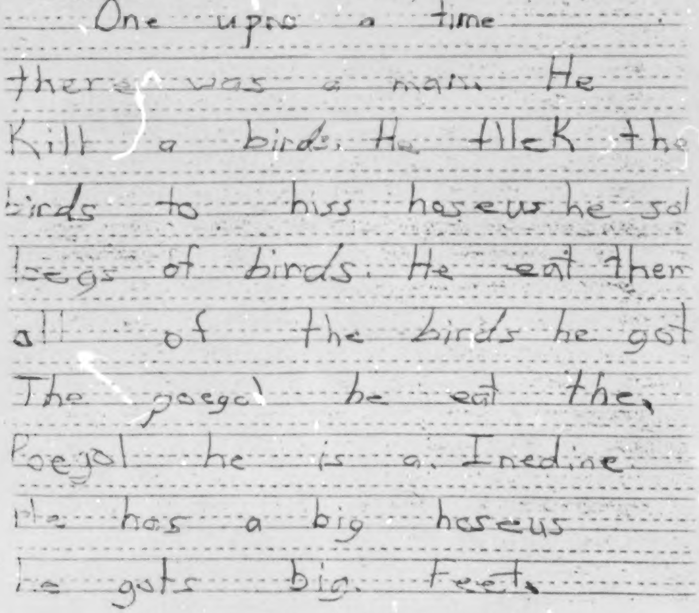


Once upon a time
John Henry he is strong
He fixs the rodoed
he helps pole op) he holpd a Gal
say said thank you

John Henry
Once upon a time , John Henry , he is strong .
He fixes the road .
He helps people .
He helped a girl .
She said , " Thank you . "

Elaine was also fairly involved during this February 18 story, with most of her behavior task-related, except for a short break after the writing of "people", where she yawns, sings, and writes down someone's phone number. This story is one of the few in which she made a change in content after she finished her story, a revision prompted by interaction with the researcher. She had originally ended the story with "She said goodbye." When the researcher asked what the girl might say, Elaine said "Thank you" and immediately changed her text.

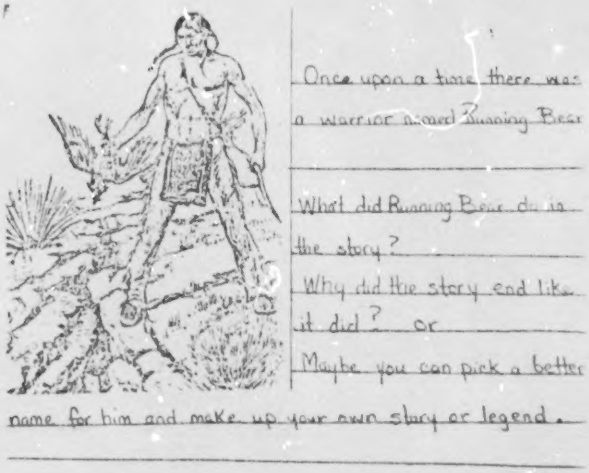
Figure VIII-12 - Elaine's Text 2/25/82



One upro a time
there was a man. He
Kilt a birds. He tllek the
birds to hiss haseuw he sol
legs of birds. He eat ther
all of the birds he got
The poegol he eat the,
Poegol he is a Inedine.
He has a big haseus
he gots big. Feet.

Once upon a time there was a man .
He killed birds .
He took the birds to his house .
He saw lots of birds .
He ate them , all of the birds .
He got the people .
He ate the people .
He is an Indian .
He has a big house .
He has big feet .

Figure VIII-13 - Story Starter - Running Bear



Once upon a time there was a warrior named Running Bear

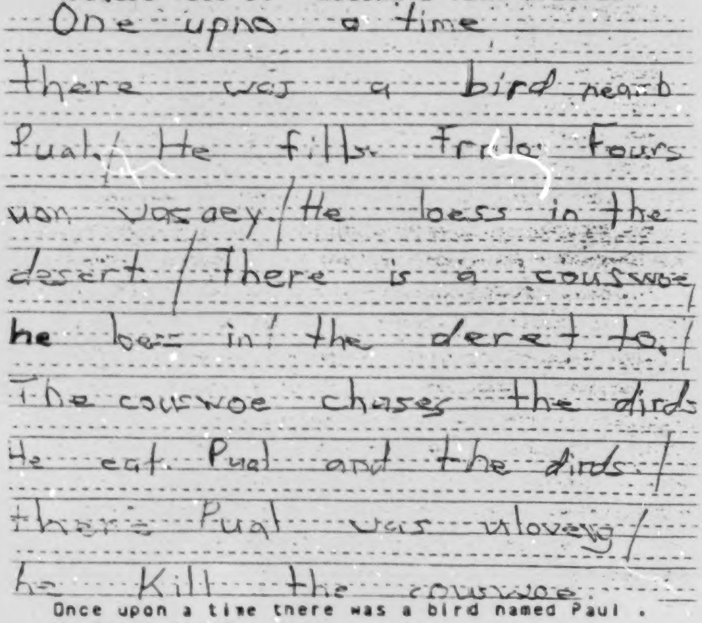
What did Running Bear do in the story?

Why did the story end like it did? or

Maybe you can pick a better name for him and make up your own story or legend.

The next week the children were involved in a unit on Indian legends that was planned entirely by Ms. Manuel, the classroom aide. The writing gave the children a choice among 8 pictures with story-starter ideas on them, including the one reproduced above. Elaine's behavior during this story suggests a good deal of involvement in the process and is very task-related. She uses resources (looking at the story starter, trying to find out how to spell words), revises, stops to think, and subvocalizes, but is not involved in social behavior unrelated to writing. Although she has not returned to her almost obsessive asking for spellings that we saw earlier in the year, she has chosen in this story not to invent every spelling she is unsure of. Instead, three times during the composition of this story she either looks for or asks about spellings.

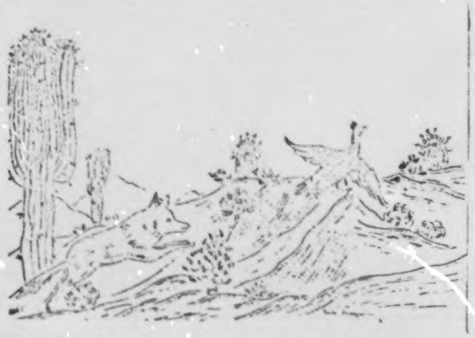
Figure VIII-14 - Elaine's Text 2/25/82



One upno a time
there was a bird nearb
Pual/ He fills frrla fours
uon vasaey./ He bess in the
desert / There is a couswoe
he bes in! the deret to. /
The couswoe chases the dirds
He eat. Pual and the dirds. /
there Pual was vlovey /
he Kill the couswoe.

Once upon a time there was a bird named Paul .
He flies far far away .
He lives in the desert .
There is a coyote .
He lives in the desert , too .
The coyote chases the birds .
He at Paul and the birds .
Then Paul was alive .
He killed the coyote .

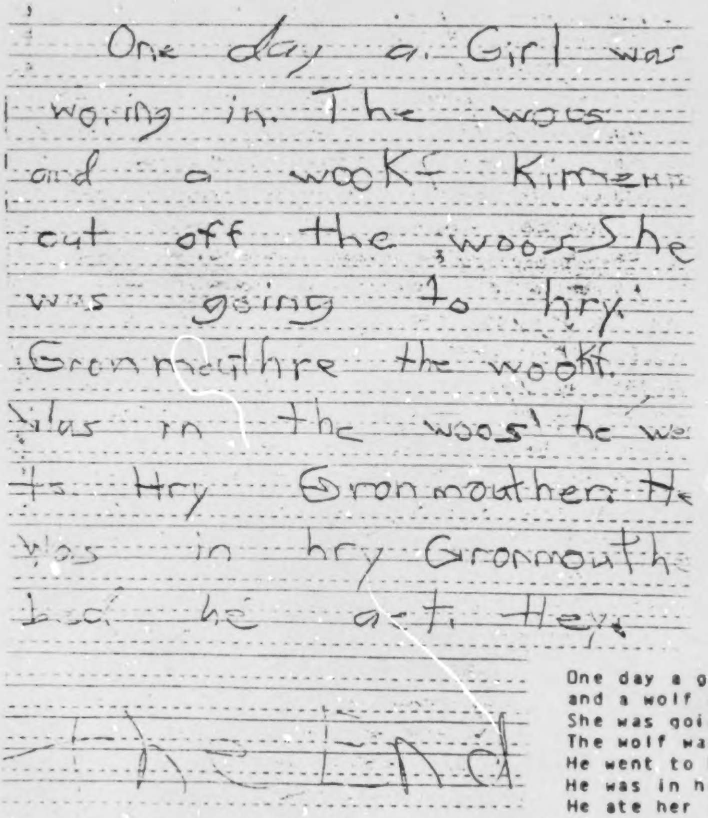
Figure VIII-15 - Story Starter - Coyote



There was a legend about Coyote and . . . .
Tell what the legend is about . . .
What coyote did . . . or
make up your own legend

Elaine's second story on February 25, written right after the first one, is also based on a story starter. The manual observation form accompanying this story reveals Elaine's involvement in the process, probably the strongest of any story yet this year. She subvocalizes a lot as she writes, stops and thinks, and rereads. She also does a good deal of revision, primarily on the surface level but of various types: she changes an A to an E, changes the T in THERE to a capital, starts to write a word and changes it, and goes back and adds periods. Throughout one gets the sense that she is really thinking about the whole story as she writes, in contrast to some of her earlier stories (such as the rodeo ones) where she seemed to be aware of just a few words at a time.

Figure VIII-16 - Elaine's Text 3/4/82



One day a Girl was
woring in The woos
and a wookf Kimen
cut off the woos. She
was going to hry
Gronmouthre the wookf.
Was in the woos he we
to Hry Gronmouther. He
was in hry Gronmouthe
bed he ati Hey.
The End

One day a girl was walking in the woods
and a wolf came out of the woods .
She was going to her Grandmother's .
The wolf was in the woods .
He went to her Grandmother's .
He was in her Grandmother's bed .
He ate her .
The
End

Elaine's story from March 4 is the first one we observed that was totally unassigned. The class had spent part of the morning in the auditorium rehearsing a skit for a school program. Ms. Howard hadn't been pleased with their performance and by the time the writing period began the whole class was feeling quite restless. To the best of our recollection, Ms. Howard chose to have unassigned writing because of the morning's unusual schedule. Elaine wrote this story quickly and again appeared relatively focused on the writing process. She did a fair amount of subvocalizing, usually rehearsing, saying, or sounding out the words as she went. She showed relatively little concern for orthographic correctness during this story. At one point she said "Oh, this is a capital," and went back to appropriately capitalize WAS. She didn't ask how to spell any words, although she did, when writing GRANMOUTHER for the third time, look at the line above to see how she'd spelled it.

Elaine's second perodic interview was conducted during this time period. Her conceptualizations about what makes a good story continue to focus on surface features like handwriting and length. Her comments about content are very general: she likes "the story," or "the way it sounds." Many of her comments about how Ms. Howard would evaluate her stories refer to specific interactions between them. Elaine states about one story that Ms. Howard "told me that she likes it best" because "my map looks neat and I colored it pretty" Ms. Howard supposedly would like another one least because "I needed help....where she had to fill in the things."

Stories: February and March, Year I

The three versions we have of Elaine's story from February 16, give insight into the editing processes Ms. Howard was involved in with her students.

Figure VIII-17 - Elaine's Text 2/16/82 (Original Version)

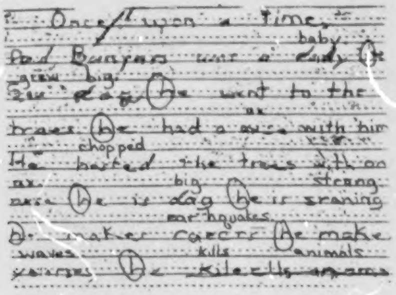
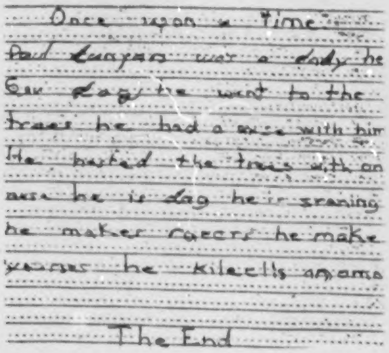
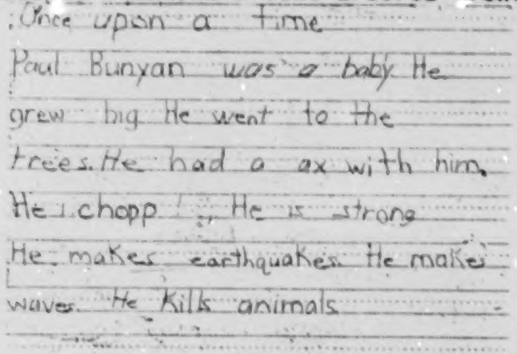


Figure VIII-18 - Elaine's Text 2/16/82 (Edited Version)



Ms. Howard has a standard procedure for editing. When a student decides a story is finished, she tells Ms. Howard, who then makes time available when she can to sit down with the student. Ms. Howard refers to these times as "editing with me." She typically reads through the story with the child, commenting on various features as she goes. In this case we don't have fieldnotes describing her dialogue with Elaine but only the visible result of the editing session. All of Elaine's invented spellings have had the conventional spellings written above (by Ms. Howard); periods have been added; the inappropriate period after TIME has been crossed out (but not the one after HE in the second line); and letters that should be capitalized have been circled. Although the editing process was not always strictly limited to these kinds of mechanical changes, this instance is not at all atypical. Ms. Howard, in this case and many others, sees the main purpose of the process as preparing the child's story for a "good" final version, rather than as helping the child to refine the story's meaning.

Figure VIII-19 - Elaine's Text 2/16/82 (Final Version)



Once upon a time
Paul Bunyan was a baby He
grew big He went to the
trees. He had a ax with him.
He chopp He is strong
He makes earthquakes. He makes
waves. He Kilk animals

Elaine's final version of the story is indeed more presentable on a surface level than her original one. Her handwriting is neater and most of Ms. Howard's emendations have been retained. A reader looking at the final version of this story might assume a certain control of mechanics on Elaine's part, but this assumption would overlook the distinction that Ferreiro and Teberosky (1982) make when they say that "writing isn't just copying." In this final transcription of her story, Elaine was acting more as a secretary than as an author, and an imperfect secretary at that. She apparently omitted the period after STRONG and left out the last two letters of CHOPPED and the 8 words following. Her obliviousness to these omissions suggests that her involvement at this stage was at best minimal.

All 5 stories from this period are attempts to write in specific genres - the tall tale, the legend, and the fairy tale. Elaine attempts to work within the genre conventions, with varying degrees of success. (These stories received mostly scores of "2" on our narrative scale.) She begins all 5 stories with ONCE UPON A TIME" or ONE DAY" and introduces the main character in the first sentence. In two cases the story remains focused on plot event, but the other three (John Henry, Paul Bunyan, and the man who killed birds) mix plot elements and character description, which in the case of the tall tales may be related to the task set in the instructional poster cited above. The two stories for which we have copies of the story-starters also suggest something of how Elaine goes about creating meaning. For the story about the man who killed birds, Elaine appears to have drawn primarily on the picture (rather than on Ms. Howard's written suggestions) and to have used it as a starting point rather than as the content of the whole story. The first 2 sentences relate directly to the picture, she then moves beyond it, and at the end, when she is perhaps winding down, she switches to a present-tense description of elements of the picture. The story about the bird named Paul is tied closely to its picture, which may explain the confusing tense shifts in the story. The sentences in the present tense can all be seen as direct descriptions of the picture, while the last three sentences of the story go beyond the picture and are in the past tense, as stories usually are. Another interesting semantic feature of this group of stories is that Elaine controls third-person narrative in all five of them, not slipping into first person as she did in the past.

Ms. Howard's impression of the stories from this group is quite favorable in terms of their content and style. The Paul Bunyan story "has the basic facts about <his> legend" and is "a pretty decent story," as is the story about the man who killed birds. John Henry is "a short story, but it does tell about the person that she started out to write about. She has the facts."

Elaine's stories from this group are not particularly complex syntactically. They are shorter then average (24-52 words, vs. an average for the year of 58 words), and have shorter T-units then average (4.5 - 6.1 words, vs. a yearly average of 5.8). She uses few subordinate clauses and primarily simple sentence structures. Her greater then usueal involvement in the meaning construction of these was perhaps best served by using simple syntactic structures which didn't distract attention from her meaning focus.

Many of Elaine's spellings in these stories are unusual ones, which is probably a reflection of her decision to worry less about spelling. Many of these may be to some extent "placeholder" spellings, where the intent is not so much accurate representation of phonetic or orthographic patterns as it is mnemonic - producing a representation that does not require much time to figure out but is accurate enough for the author to decipher in context when she goes back to it. Examples of these spellings are:

anomac/animals
kimenm/came
raecrs/earthquakes
kileclls/kills
poleopl/people
tllek/took
yoursea/waves

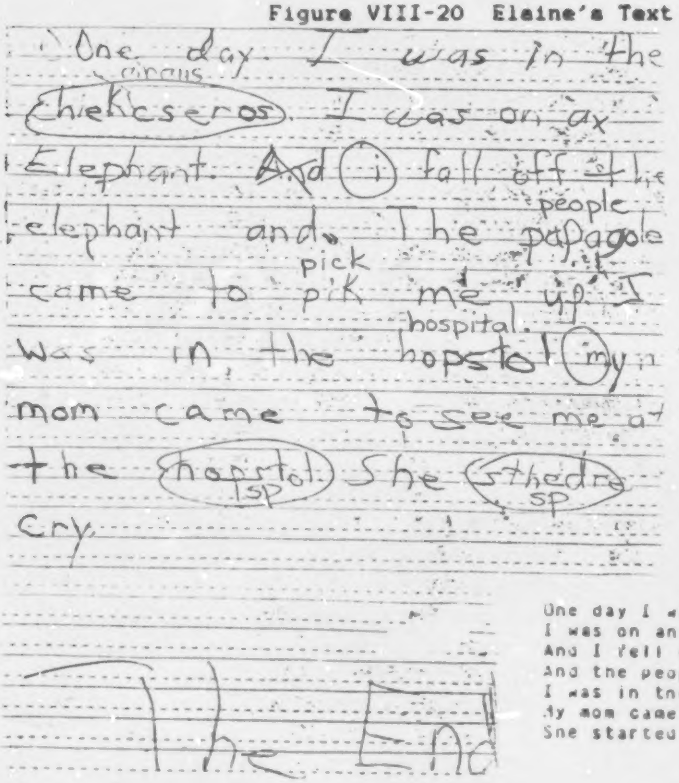
Her percentage of conventional spelling in these stories ranges from 61 to 77%, as compared to her yearly average of 81%. The observational data clearly show this to be a function of her choice to use invented spelling more often. (Interestingly, Ms. Howard commented around this time that Elaine's spelling is improving and that she is increasing her control of high-frequency words, which suggests that Ms. Howard is also aware that this apparent decline in spelling is not an actual one.)

The punctuation in these stories follows her usual pattern of omitting most obligatory punctuation and of often inserting periods before capitals. The story of the bird named Paul is a striking exception. Of the 9 obligatory periods she omits only 2, and she inserts only 1 inappropriate period, before PAUL. There is no indication from the observational notes that she had any help in deciding how to punctuate. The obvious inference is that her underlying competence may be much more advanced than what her performance usually reveals and than what she is able to verbalize.

Writing Process: March through May, Year I

Elaine's writing during these last 5 stories of Year I was generally characterized by a sense of involvement on her part. One gets a strong feeling that she has very much assumed ownership of her writing and that her focus is not particularly on correct form or on pleasing others but on saying what she wants to say.

Figure VIII-20 Elaine's Text 3/9/82



One day. I was in the circus Chiekcseros. I was on ax Elephant. ~~And~~ i fall off the elephant and. The people papagole came to pick pik me up I was in the hospital hopstol my mom came to see me at the hopstol sp She sthedre sp cry.

The End

One day I was in the circus .
I was on an elephant .
And I fell off the elephant .
And the people came to pick me up .
I was in the hospital .
My mom came to see me at the hospital .
She started to cry .

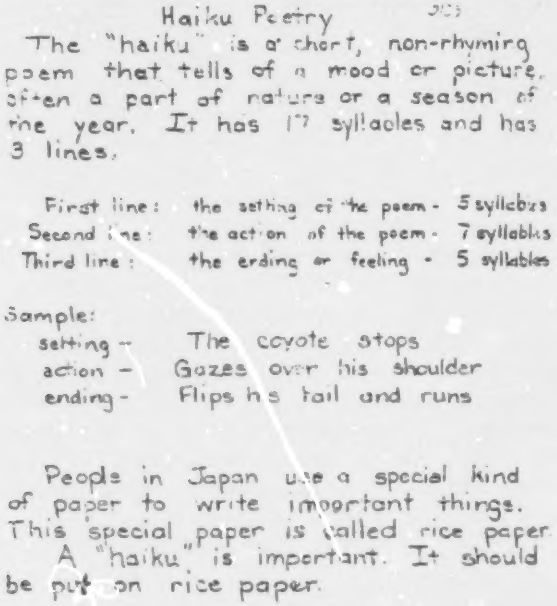
On March 9 the class was working on a circus unit. A clown had visited the classroom that day, and the children had a choice of story starters to write from, of which Elaine chose the following:

> YOU DECIDED TO JOIN THE CIRCUS, NOW YOU
> NEED AN ACT
>
> 1. Look at the pictures in this folder
> 2. Pick a picture you like.
>   This can be your act.
> 3. Write a story about your
>   life in the circus.
> 4. In the story:
>
>   a) Tell how you joined the circus;
>   b) Tell what you act is like;
>   c) Tell why you like being in the circus.

She wrote her story rapidly with few pauses for any reason. Her only interruption was when she stopped after writing I WAS IN THE HOSPITAL and said to a neighbor, "Look at all I wrote. I sure wrote fast."

On March 25, Elaine attempted a very different kind of writing from any she'd done previously. The class was doing a unit on haiku poetry. Two days before, Ms. Howard had told the class about what a haiku is and they had written one together. The elements that she stressed in her instruction were: the 5/7/5 syllable pattern of the haiku; nature as the usual subject matter for haiku; poetry as being made up of word pictures that aren't necessarily complete sentences. She also gave the students the handout shown in Figure VIII-21.

Figure VIII-21 Haiku Poetry Handout



Haiku Poetry

The "haiku" is a short, non-rhyming poem that tells of a mood or picture, often a part of nature or a season of the year. It has 17 syllables and has 3 lines.

First line: the setting of the poem - 5 syllables
Second line: the action of the poem - 7 syllables
Third line: the ending or feeling - 5 syllables

Sample:
setting - The coyote stops
action - Gazes over his shoulder
ending - Flips his tail and runs

People in Japan use a special kind of paper to write important things. This special paper is called rice paper. A "haiku" is important. It should be put on rice paper.

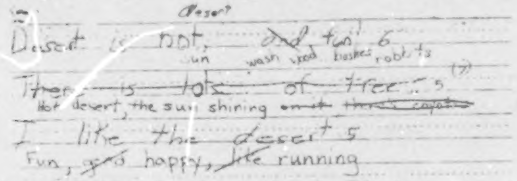
On the day that we observed Elaine, the children were asked to write individual haikus. She chose to write about the desert and was quite absorbed in the task and intrigued by the genre, clapping out syllables as she went in order to fit into the haiku form. Her first version read as follows (The numbers at the ends of the lines are the syllable counts that Ms. Howard had asked them to include):

Desert is hotd and fall 5
there is loated of trees 7
I like the desert 5

She was quite pleased with it. Since she had miscounted the syllables and thought she had produced a 5/7/5 pattern, the researcher pointed this out to see how she'd react. When she realized she'd actually produced a 6/5/5 pattern, she chose to leave the poem as it was, but did change the numbers to reflect the actual syllable count. She then asked the researcher to edit with her; she liked the content but wanted help with capitalization and spelling. With the researcher's help she capitalized the beginning of each line and corrected the spelling of HOT, FUN, and LOTS.

At this point Ms. Howard chose to come over to work with Enna. She began to suggest changes so that the haiku would be more descriptive and picturesque and have the correct syllable count. She asked questions such as, "What makes the desert hot? What makes it fun?", and wrote parts of Elaine's answers on her paper. She told Elaine that in a poem you write pictures rather than sentences and at some points had her close her eyes to picture the desert better. When they had generated a number of images, Ms. Howard worked with Elaine to cut down the number of syllables in each line. At the end of this session, Elaine's paper looked like this:

Figure VIII-22 Elaine's Text 3/25/82



desert
Desert is hot, ~~and~~ fun 6
sun wash wood bushes rabbits
~~There is lots of trees~~ 5 (7)
Hot desert, the sun shining ~~[illegible]~~ ~~[illegible]~~
I like the desert 5
Fun, ~~and~~ happy, ~~like~~ running

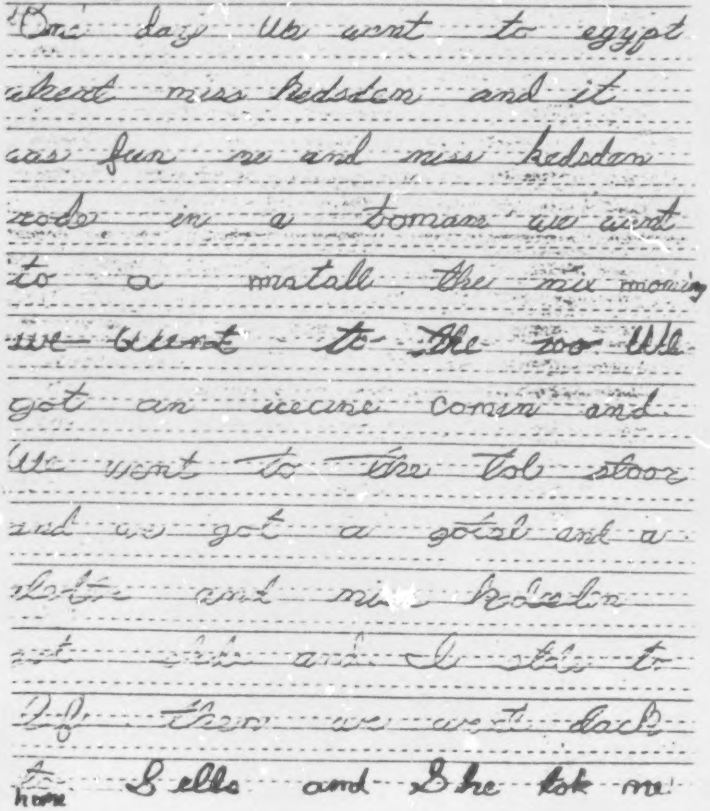
The final version of the haiku, which Elaine was to copy over, read:

Desert is hot, fun.
Hot desert, the sun shining.
Fun, happy, running.

This is a much closer fit to Ms. Howard's idea of what a haiku is (see Figure VIII-21), but Elaine preferred her original version. Throughout this first year Elaine has gradually assumed a greater sense of control over her writing, but on this occasion she wasn't allowed to retain the ownership she'd clearly felt in relation to her first draft. Ms. Howard, in focusing on product during the editing, gave no regard to Elaine's intentions for this piece of writing. The piece that resulted was in a sense more Ms. Howard's writing than Elaine's. For a child like Elaine whose writing became far more successful as she discovered her own reasons for writing, a focus on product over process seems especially misplaced.

On April 15, the students were involved in a unit on Egypt. On this particular day, they had a choice of 3 topics: Your friend was a pharoah who died; The life of a slave in Egypt; or Egypt today. Elaine produced the following story:

Figure VIII-23 Elaine's Text 4/15/82



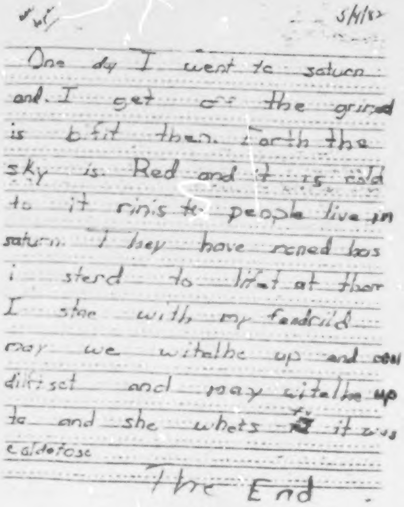
One day We went to egypt
wheat miss kedsten and it
was fun me and miss kedsten
rode in a tomane we went
to a matall the nix moning
we went to The zoo We
got an icecine comin and
We went to the tol stoor
and we got a gotal and a
[illegible] and miss kdstn
[illegible] and I [illegible] to
[illegible] then we went back
to Sells and She tok me
home

One day we went to egypt with Miss Kasten
and it was fun .
Me and Miss Kasten rode in a train .
we went to a motel .
The next morning we went to the zoo .
we got an ice cream cone
and we went to the toy store
and we got a gorilla and an alligator .
And Miss Kasten got scared
and I started to laugh .
Then we went back to Sells
and she took me home .

Her behavior suggested a good deal of involvement in the story. She stopped to think repeatedly, as well as subvocalizing and revising from time to time, but did not initiate any interruptions. When her seatmate Daniel tried to interrupt her in the middle of a sentence, she said, "Wait," and kept on writing.

Our next observation of Elaine was on May 4, when the class was doing a unit on outer space. The assigned topic for that day was "What I Saw at My Porthole."

Figure VIII-24 Elaine's Text 5/4/82



5/4/82

One dy I went to saturn
and. I get of the grind
is b.fit than. Earth the
sky is. Red and it is cold
to it rinis to people live in
saturn. They have rened bos
i sterd to lfat at tham
I stae with my fendrild
may we witelhe up and cou
dikisct and may witelhe up
to and she whets it wus
caldotosc
The End .

One day I went to Saturn
and I got off the ground .
It's different than Earth .
The sky is red
and it is cold , too .
It rains , too .
People live in Saturn .
They have round heads .
I started to laugh at them .
I stayed with my friend May .
We woke up and cooked breakfast .
And May woke up , too ,
and she watches tv .
It was cartoons .
The End

She was again very involved in her writing; her few pauses were task related. While writing the first line of the story she looked up at the theme-related bulletin board to see how to spell SATURN but chose to use invented spellings during the rest of the story.

Our final observation of Elaine during Year I was on May 11. Elaine chose from three topics to write about bicycle safety.

Figure VIII-25 Elaine's Text 5/11/82

One day I was riding safe on my bicycle and stopped to watch
go by .
And I went across the road before the cars came .
I went home safe . When I went in ,
I cleaned my room and picked up the toys , too .
When my mom came home , she said , " Good for you . "
I went to my auntie's house safe
and I got some pop .
I went home
and I crashed
and my auntie came after me
and she took me home , too .
And my
mom took me to the hospital
and I broke my leg .
And I had lots of scratches , too .
and I stayed in the hospital and I went to sleep .
And I woke up the next morning
and I ate breakfast .
The
End

There was a substitute teacher that day and the class was somewhat restless, but Elaine maintained the high level of concentration that has been typical for this last part of the year. She checked and revised spellings a few times, but otherwise focused on content. When asked where she got the idea for her story, she was unable to be more specific than to say "I made it up."

Two interviews were conducted with Elaine during this time period. In her Writing Concepts interview on March 9, she had more extensive and specific answers to most questions than she did in October, but continued to focus on surface features. She characterized a particular writer as being proficient because of "the way he writes"; this general assessment was followed by some specific ones: he writes "slanted and straight"; "he doesn't erase <or> mess up"; his stories aren't short; he and other good writers "learned all the words when they were in second or third grade." Predictably, poor writers "need editing and they erase and they write short stories and they don't put their name...they write sloppy." Her comments about spelling suggest the move towards more independence that we have seen in her behavior. In October she said that when she didn't know how to spell a word she'd ask the teacher or talk to her group of seatmates. In this interview she said she'd "write it any way and sound it out." In this interview she also suggests that she likes writing for several reasons: "I like to put them in books and I like to put periods and...edit it and I like to write it on pieces of paper so people could look at it." In her periodic interview of May 18, she continues to characterize her writing on the basis of either vague global features or surface ones; a story is good because "I like it" or because of "the handwriting and the periods and the capitals." As the year progressed, she became more vocal in her answers to these interview questions but not more sophisticated.

Stories: March through May, Year I

Elaine's four stories from this period (her haiku will not be discussed further) were written as part of four very different curriculum units but are very similar in that they all deal with imagined experiences from her own life. Both when in the circus and when "riding safe" on her bicycle she had accidents and went to the hospital. Egypt looks remarkably like the U.S., with motels, zoos, toy stores and ice cream cones. Saturn is different from home, with red sky and round-headed people, but Elaine can still stay with her friend May there and watch cartoons. In all four of these stories, the teacher-selected topic makes an appearance, very briefly (as with Egypt) or at some length (as with Saturn), but then Elaine's desire for self-expression takes over. This may be seen in relation to her growing independence as a writer - she is able to use the story-starter as a jumping-off place but is not particularly constrained by it; she acts out of what she wants to say rather than being particularly concerned with the teacher's or the story-starter's intentions. From this group of stories Elaine particularly liked the story about Saturn and the one about riding safe on her bike because "it's a long story...and I made it up." (It should be noted that these two stories and the Egypt one are her longest since the beginning of the year.)

She chose her haiku as her least favorite of a group of seven pieces; when asked to comment on it, she said, "Ms. Howard helped me" and that it was hard because "we had to think."

Although Elaine has a higher percentage of conventional spellings in these stories than in the previous group, she continues to operate from a strategy of inventing spellings rather than asking for help in most cases when she doesn't know a word. Some patterns that are evident in her invented spellings for these stories are:

-phonetic/orthographic patterns	lef/laugh
	matall/motel
	nix/next
	stoor/store
-unusual spellings	befxitst/breakfast
	dilftact/breakfast
	gotal/gorilla
	puti/picked
	tomene/train
-very long invented spellings	bookakec/broke
	chiekcaeros/circus
	coldetoac/cartoons
	fendnld/friend
	witelhc/woke

The unusual and very long spellings may be "placeholder" ones, where she is aiming for a speedy representation of the word rather than a precise one.

The bicycle story shows a variety of spellings of the -ed morpheme. In CULED (cleared) she spells it conventionally; in CIRIFT (crashed) she represents it with a phonetic rather than morphological spelling; and in PATI (picked), STAE (stayed) and STOP (stopped) it is not represented at all, which may represent a dialect influence. This suggests that even an apparently straightforward orthographic feature may be learned gradually and in context rather than once and for all. One further invented spelling of interest in this group is Elaine's spelling of PAPAGOLE (which includes the name of her tribe) for "people." Many Native American languages use a word meaning "the people" to refer to their tribe. Papago is one of these, and although the word for themselves and "the people" is "O'odham" rather than "Papago," Elaine's spelling may be related to this concept.

Elaine's percentages of conventional punctuation in this group of stories are among her lowest of the year, suggesting that she is giving her attention more to content than to visual features of her writing. She follows her usual pattern of omitting many periods and inserting some before capitals. Her problems with capitalization include many failures to capitalize where there should have been sentence boundaries, a few inappropriate capitalizations, and several failures to capitalize proper names, including the word "I" 10 times in the bicycle story.

Table VIII-1 Words per Story: Elaine Year I

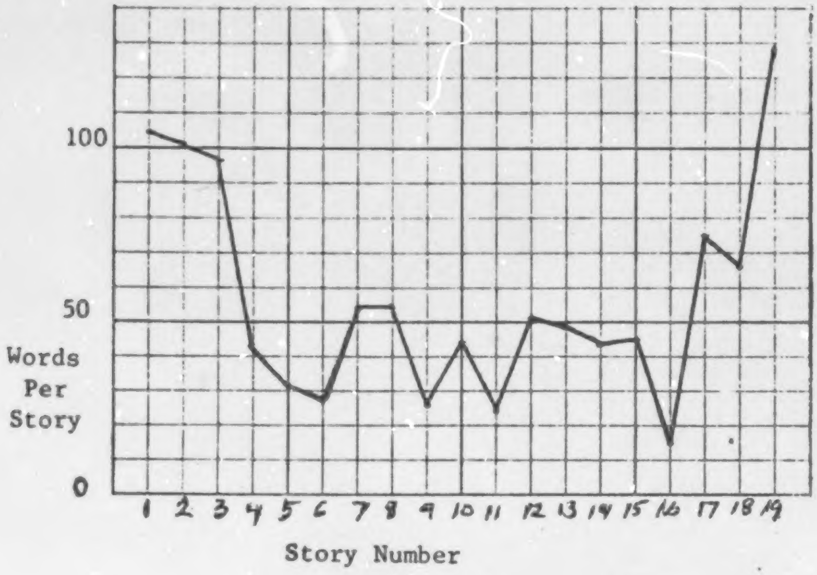


Table VIII-2 Words per T-Unit: Elaine Year I

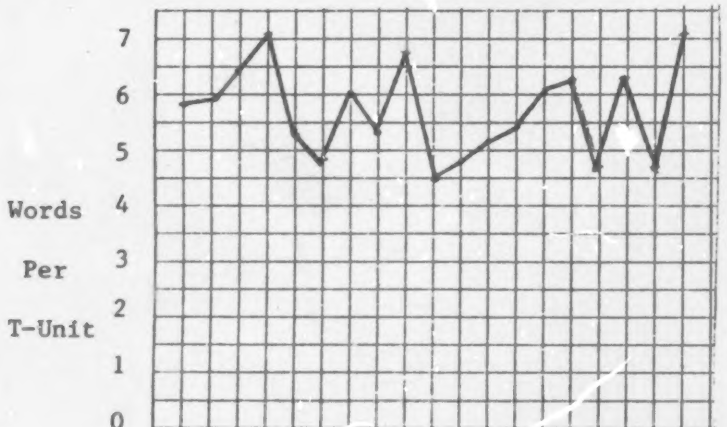


Table VIII-3 Clauses per T-Unit: Elaine Year I

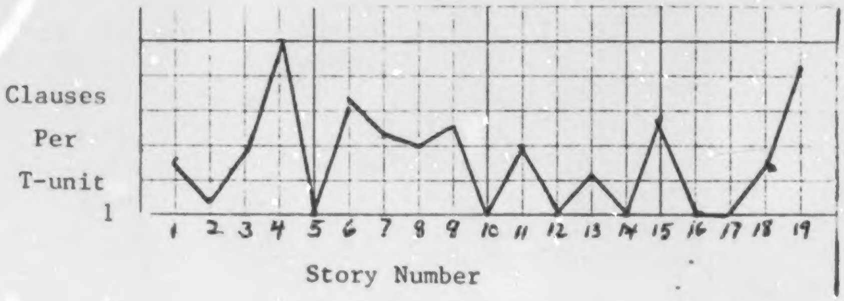
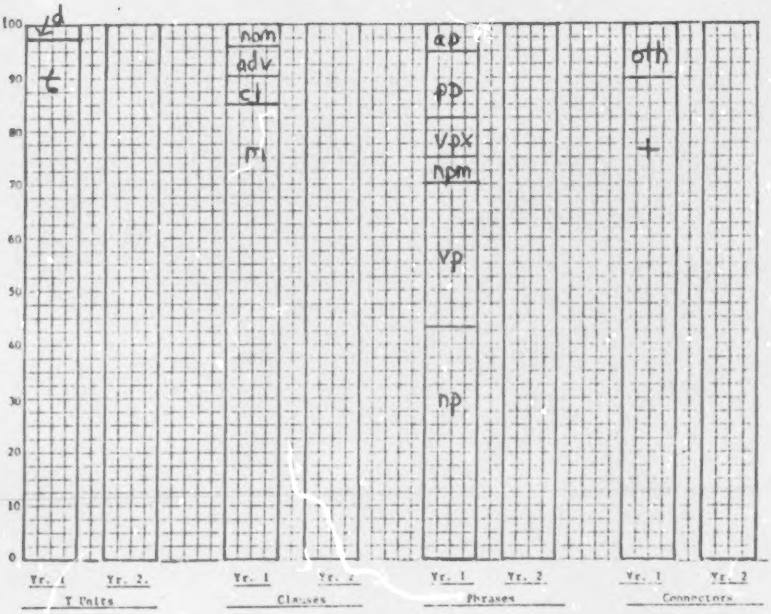


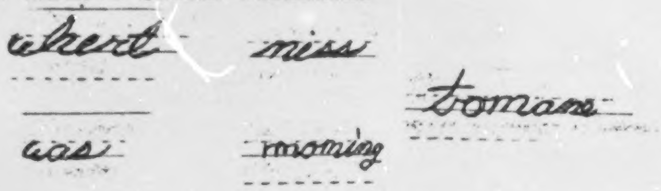
Table VIII-4 Syntactic Development: Elaine Year I



Elaine's Egypt story is the only one all year that she wrote in cursive script. Our notes don't reveal anything about why she chose to do so, but we do know that Ms. Howard had spent some time on cursive writing with the class around that time and that several of the children were beginning to use it in their stories. Figure VIII-25A illustrates a few of the difficulties Elaine had with this early attempt at cursive.

Figure VIII-26A ELaine: Cursive Letter Formation

whert
was
miss
morning
tomane



In WHERT (with) and WAS the w's blend into the next letter so that they look like u's. In MISS (miss) she leaves a loop off the M; in MORNING she puts an extra loop on the first M and in the middle has what could be either an M or an R and N run together. In TOMENE (train) her T has a loop somewhat like a B. Otherwise, her handwriting in this story is quite legible. In Year II we will see further examples of Elaine's cursive writing.

Summary: Year 1

Elaine's growth as a writer during this first year of the study has been characterized by a gradually increasing ownership of the process. Early in the year her focus tends to be on meeting the teacher's expectations and on surface features like spelling. When she is not particularly interested in a topic, which is often, she seems to write just to fill up space and produces uninteresting, disjointed stories. Sometime around the tall-tale and legend units in February this focus begins to shift; this is evidenced both in her greater involvement in the writing process and the more coherent nature of her stories. Although this change seems to have begun when she was working in genres that she found interesting, by the end of the year she is able to take any topic and use it as a jumping-off point for a highly personal narrative. When one compares her first rodeo story (Figure VIII-2) to her bicycle safety story (Figure VIII-25) it is obvious that she has come a long way in taking control of an assigned topic.

Looking at measures of Elaine's syntactic development provides another perspective on her writing over this first year. Tables VIII-1, 2, 3, and 4 summarize aspects of this development; they are most meaningful when considered in light of what we have seen about Elaine's writing process.

The length of Elaine's stories in Year I ranged from 14 words for her haiku to 128 words for the bicycle safety story, with a median of 49 words and a mean of 56.8. Table VIII-1 shows that she wrote 3 very long stories at the beginning of the year, then settled down to a shorter length, and again wrote 3 long stories at the end of the year.

Thinking back to our observations of Elaine's writing process, the explanation that suggests itself is that these changes are related to changes in how Elaine conceived of the writing process. At the beginning of the study she was very excited about being observed and tried to please and impress the researchers by writing as much as possible. As she got more involved in the creation of meaning, her stories got shorter since they involved more thinking. Finally, towards the end of the year, her increased confidence and control made it possible for her to concentrate enough to write a lot more in the same length of time. It should also be noted that within the long-short-long pattern for the year as a whole, there is still a good deal of individual variation between stories, reflecting all the contextual and personal influences acting on the writer at any particular time.

Tables VIII-2 and VIII-3 illustrate the average words per T-unit and clauses per T-unit for each of Elaine's stories in Year I. Her means for the year are as follows:

Table VIII-5 - Syntactic Change - Elaine-Year I

	First Half	Second Half	Overall
Words/T-Unit	5.93	5.68	5.8
Clauses per T-Unit	1.18	1.14	1.16

These figures are lower for Elaine than for any of our other 5 case study subjects. They are also lower than comparable figures cited in O'Donnell's study (1967) for third-grade writers (7.67 words per T-unit and 1.18 clauses per T-unit). Both ratios decrease slightly from the first to the second half of Elaine's stories in Year I. These figures confirm the reader's sense that Elaine's stories tend to consist of short, relatively unsophisticated structures which are more typical of younger writers' development. The graphs indicate that there is a fair amount of variation from story to story but no particular general trend. Table VIII-4 gives a breakdown of the kinds of syntactic structures Elaine used in Year I. (See Chapter IV for an explanation of the terminology used.) The vast majority of her T-units are "simple" ones; that is, she used dialogue only a few times and no questions or imperatives. Eighty-five percent of the clauses she used were main clauses, with about 5% each of adverbial, nominal and conjoined clauses. Of the major phrase types, she uses roughly equal numbers of noun phrases and verb phrases, but rarely modifies verb phrases. The vast majority of connectors Elaine uses are simple additive ones like AND; she also uses some disjunctive ones like BUT and adverbial phrases like ONE DAY, but no WH- words or other types of connectors like THEN."

Table VIII-6 Percent Conventional Spelling: Elaine Year I

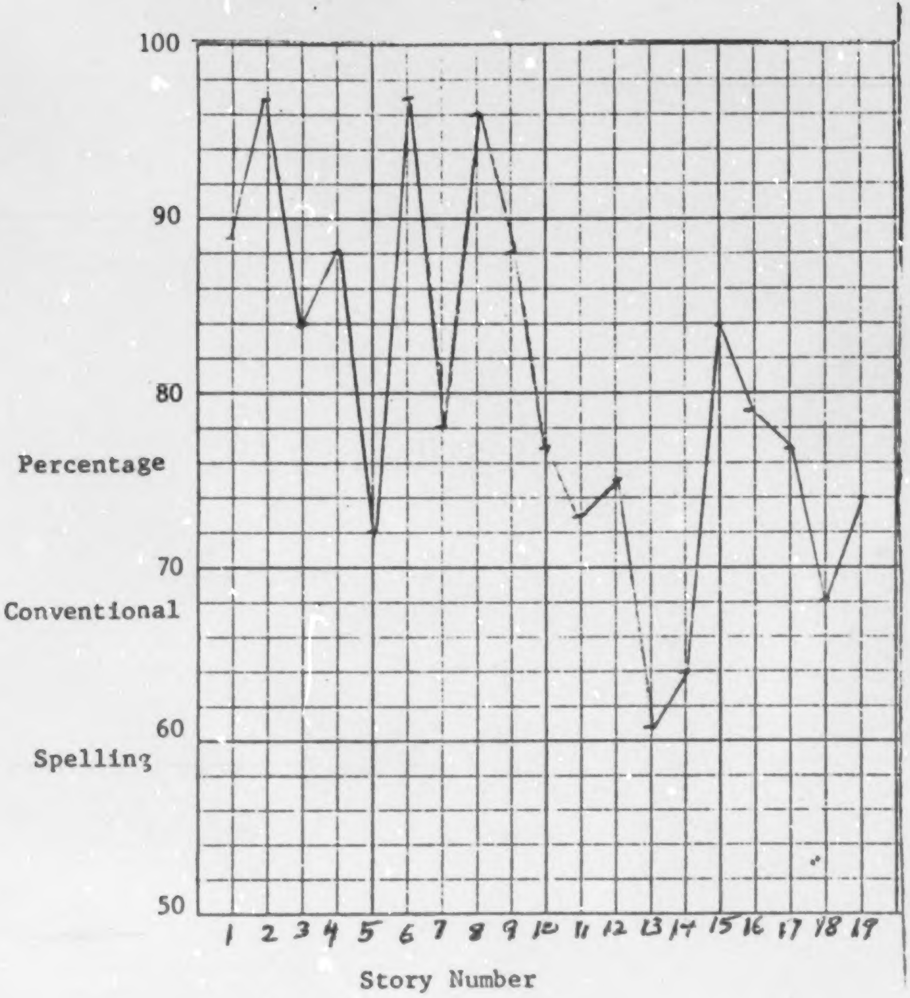
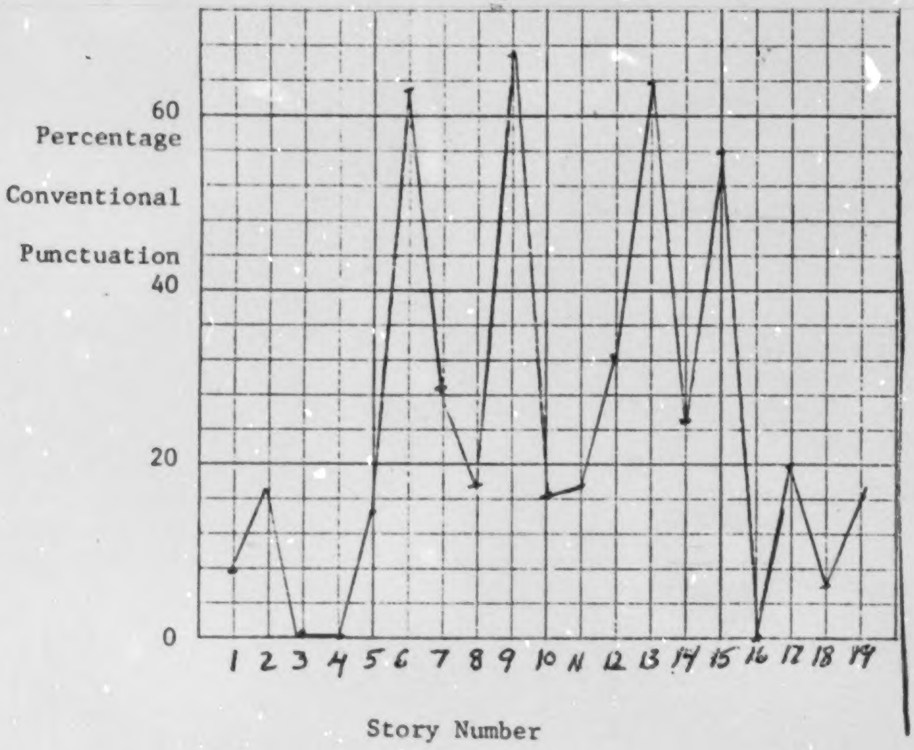


Table VIII-7 Percent Conventional Punctuation: Elaine Year 1



Elaine's orthographic development during Year I is complex, as Tables VIII-6 and 7 suggest. Of 1103 words Elaine wrote in Year I, 891, or 80.78%, were conventionally spelled. In the first half of her stories, 88.38% were conventionally spelled as compared to only 73.19 in the second half. Table VIII-5 shows this downward trend as well as the variation from story to story (from 61 to 97% conventional spelling - note that this includes 2 stories that are recopyings of edited versions.) It is, of course, obvious from all we have seen of Elaine over the year that this trend is not an indication that her spelling ability has decreased but a result of contextual influences and conscious choices on her part. Early in the year she put a lot of effort into trying to spell every word correctly. By the end of the year she had chosen to concentrate on the creation of meaning; she intentionally wrote what she knew were not standard spellings. This is one of the clearest possible examples that children's performance does not always reflect their underlying competence. Elaine's spelling performance is a result of not only her memory bank of spellings and repertoire of spelling strategies but her use of physical and human resources and her decisions about the importance of spelling.

Looking at patterns for particular words provides another perspective on Elaine's spelling development. The 20 words she uses most frequently, as shown in Table VIII-8, are for the most part spelled conventionally.

TABLE VIII-8 - High Frequency Words - Elaine - Year I

Word	Frequency	Conventional	Invented
the	95	95	0
and	94	94	0
to	47	47	0
went	47	47	0
he	43	43	0
I	39	39	0
a	33	33	0
was	30	30	0
my	19	19	0
we	19	19	0
rodeo	18	18	0
home	17	16	1
in	17	17	0
is	14	14	0
day	13	13	0
had	13	13	0
there	13	11	2
they	13	10	3
me	12	12	0
one	12	12	0
	608	602	6

These 20 words occur a total of 608 times, which is 56% of all words used by Elaine in Year I. Only 6 invented spellings occur in these 608 words. One of them is SOONME for HOME on January 8, which we discussed earlier as probably being intended to represent some other word; the other 5 are 5 of the 26 observed spellings for THERE and THEY. Elaine's 202 other invented spellings in Year I occur on the 216 other words, used a total of 472 times, which make up the other 44% of her writing. Throughout the year we have seen examples of the kinds of invented spelling strategies Elaine uses. Looking at the variety of spelling for some individual words can further illustrate some of these patterns. Table VIII-9 shows, for three words, the number of conventional spellings and the variety of invented ones, listed alphabetically.

TABLE VIII-9 - Selected Invented Spellings - Elaine - Year I

	Conventional	Invented	
people	5	7	papagole peole(2) peopol(2) poleo poleopl
started	1	5	starid startd stde sterd sthedre
breakfast	0	2	befxitst diftact

Of Elaine's 7 invented spellings of PEOPLE, one of them is the unusual spelling PAPAGOLE which was discussed earlier. The other 6 all involve permutations of the four letters, P, E, O, and L, which are those occuring in PEOPLE. A spelling like PEOPOL is a closer match phonetically than one like POLEOPL, but the orthographic strategy of knowing what letters are in the word is strong in both. In STARTED, the interesting element is the treatment of the -ed morpheme, which Elaine generally does not control very much in her writing in Year I. These spellings all have a D in them, but not necessary at the end or preceded by an E. One gets the sense that each spelling is to some extent a re-invention (with phonetic and letter-permutation strategies as major considerations) and that she is not at this point operating with a conceptualization of a consistently spelled past-tense morpheme. Her two spellings for BREAKFAST, which occurred a week apart, are typical of many of her placeholder spellings. The beginning and final consonants tend to be correct (the D of DILFTSCT is likely to be a reversal) and there are other consonantal common points (f and s, and possibly x, which is phonetically /ks/), but there are also some anomalous consonants and the vowels are unpredictable.

We have already seen in detail how Elaine conceptualized punctuation. Table VIII-6 above illustrates the varying extent to which her stories were punctuated conventionally. The percentage of conventional punctuation for each story ranges from 0 to 67%; the percentage across all stories is 21.1%. Table VIII-9 illustrates that in most cases this involved periods.

Elaine used some periods conventionally but inserted and omitted many more. Commas and quotation marks were virtually always omitted. It is interesting to look at the few stories where Elaine used punctuation more conventionally. Fifteen of her stories had punctuation used conventionally from 0 to 33% of the time, but 4 stories ranged from 56 to 67% correct. Two of these are recopyings of edited versions where the teacher had emended the punctuation, but the other 2 are not. One of them is the story about the bird named Paul from February 25; the other is the circus story from March 9. Our field notes from these stories do not give any indications that Elaine got any help from anyone on punctuation; indeed, they are both stories where she was strongly involved with the task and had little interaction at all. One is tempted to hypothesize that Elaine does have some tacit sense of how sentence-boundary punctuation works, and that when she is involved in creating meaning (rather than thinking about her rule that periods go with capitals) this tacit knowledge is freed up and allowed to operate. At the very least, the evidence of these 2 stories suggest an underlying competence beyond what Elaine's usual performance reflects.

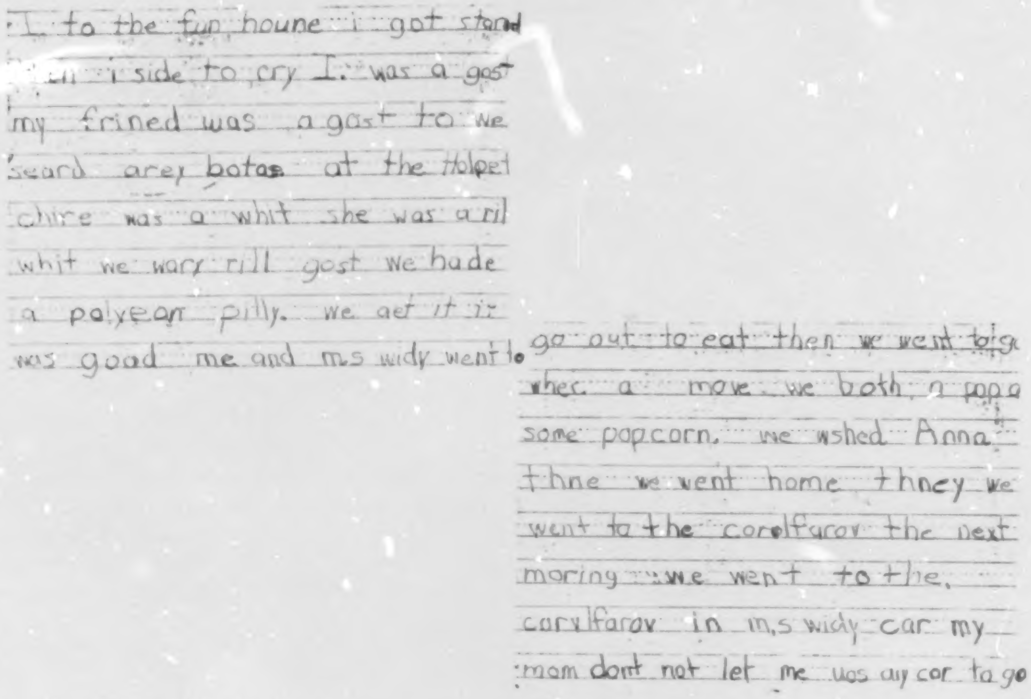
Year II

Writing Process: November and December

As mentioned earlier, we began Year II thinking we had lost Elaine as a subject because her mother had enrolled her in a private "back-to-basics" school. However, early in November she returned to the public school, where she was placed in the same pre-fourth-grade class as three of our other subjects, where she remained for the rest of the school year. She was very happy to find out that we'd be working with her for another year.

The first of Elaine's stories from Year II was written on the day we first discovered Elaine back in the elementary school. She was excited to see us and to work with us, which she expressed by including the researcher who was working with her (Sandra Wilde) as a character in her story. In Ms. Caldwell's classroom, writing was virtually always unassigned, creating a very different context for Elaine's stories in Year II. On this first occasion, she has no trouble deciding what to write about and plunges right in very eagerly. As in Ms. Howard's classroom, students in Ms. Caldwell's room sit in small groups as they write. Elaine interacted to some extent with other children in her group during the writing of this story, mainly socializing rather then asking for spellings or other help. Although she socializes a lot, she also stays very involved in the continuity of

Figure VIII-27 - Elaine's Text 11/2/82

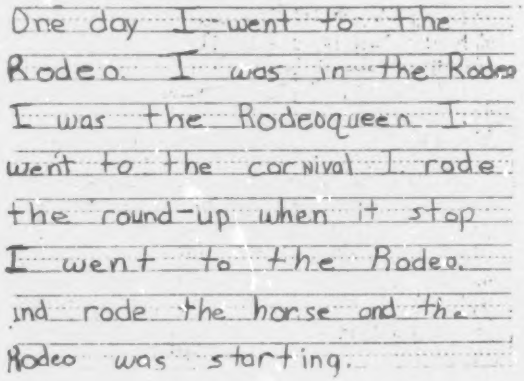

I to the fun houne i got stand
[illegible] i side to cry I. was a gost
my frined was a gost to we
seard arey botas at the Holpet
chire was a whit she was a ril
whit we warr ril gost we hade
a polyeon pilly. we aet it ir
was good me and m.s widy went to go out to eat then we went to go
whec a move we both a pop a
some popcorn. we wshed Anna
thne we went home thney we
went to the corolfarov the next
moring we went to the
corvlfarov in m.s widy car my
mom dont not let me uos ay cor to go

I went to the fun house .
I got scared .
Then I started to cry .
I was a ghost .
My friend was a ghost too .
We scared everybody at the hospital .
Cheri was a witch .
She was a real witch .
We were real ghosts .
We had a pumpkin pie .
We ate it .
It was good .
Me and Ms. Wilde went to go out to eat .
Then we went to go watch a movie .
We bought a pop and some popcorn .
We watched " Annie . "
Then we went home .
Then we went to the carnival .
The next morning we went to the carnival in Ms. Wilde's car .
My mom did not let me use our car to go .

her story, as evidenced by her frequent re-reading and stopping to think, both of which suggest she is concentrating on the development of the story as a whole. She chose to use invented spellings in this story; the only time she used a resource to spell a word was when, writing CORVLFAROV (carnival) the second time, she looked back to see how she'd written it the first time. Her four revisions are all to erase or correct a single letter she had just written, suggesting that she is choosing to change only immediate "slips of the pen." The length of this story also suggests her eagerness about being observed writing again; at 114 words it is longer than all but one of her Year I stories and will be the second longest of Year II.

Two weeks later, on November 16, we observed Elaine and Ms. Caldwell working with this story in an editing session, as preparation for making it into a book. Elaine had chosen this story as one of her favorites, and began by reading it to Ms. Caldwell, who asks her if she used any Halloween words and then helps her find GHOST and WITCH on the Halloween chart. Ms. Caldwell then goes through the first sentence with her and helps her to see where it ends (so she can add a period) and to insert "went", which is needed to produce acceptable syntax. She then asks Elaine to show her where the second sentence starts and asks her what a sentence starts with; Elaine responds "a capital." Ms.Caldwell helps Elaine correct the spelling of "started" by listening to the sounds, picking up the AR pattern from CAR, and recognizing the ED endings. Ms. Caldwell doesn't insist that all spellings be corrected but focuses on selected ones. At this point the researcher asks Elaine to tell Ms. Caldwell why she had put periods after "I" (her old rule about periods and capitals going together). Ms. Caldwell explains to Elaine why they aren't needed and talks about the role of periods generally. The word "sentence" is never formally defined but is used in context, Ms. Caldwell talks about where it makes sense to stop. During Elaine's interview about this group of stories, which took place after she had made this one into a book, she surprisingly picked it as her least favorite of four. Although she had liked it a lot at first, by the time of the interview she felt "it was funner before to write it but now it isn't"; she was a little sick of it.

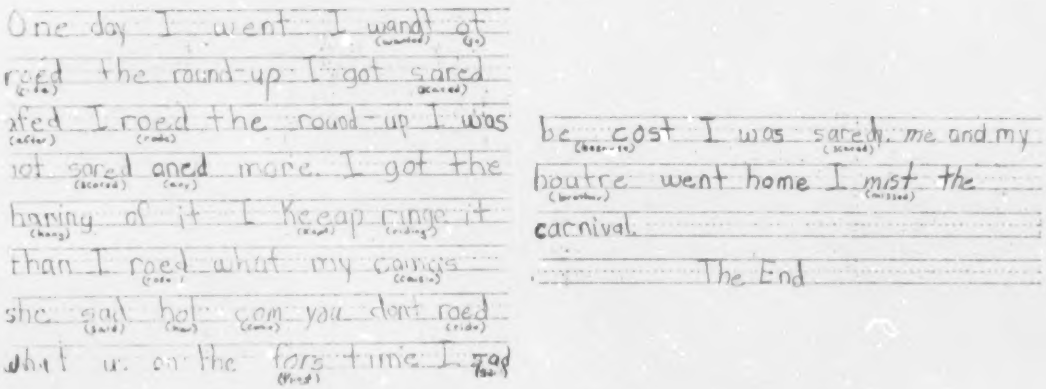
Figure VIII-28 - Elaine's Text 11/9/82


One day I went to the
Rodeo. I was in the Rodeo
I was the Rodeoqueen I.
went to the cornival I. rode.
the round-up when it stop
I went to the Rodeo.
ind rode the horse and the
Rodeo was starting.

One day I went to the Rodeo .
I was in the Rodeo .
I was the Rodeo Queen .
I went to the carnival .
I rode the round-up .
When it stopped I went to the Rodeo and rode the horse ,
and the Rodeo was starting .

On November 9 Elaine wrote about the rodeo, which was a suggested topic for writing that day (since November is the time of the annual community rodeo and carnival.) She is involved in a great deal of social interaction during this story; our notes describe her as taking part in conversations with other children about video games, the rodeo, spelling, stepfathers, and Papago identity. She has decided to aim for conventional spelling in this story; when asked why, she says it's because Ms. Caldwell prefers her to, and that she also likes it herself. She does not, however, ask other people how to spell words as much as she did in Year I; instead, she refers to a list of rodeo words on the board, uses the dictionary, and thinks out spellings for herself. The researcher asks her how she decided to use resources of this type rather than asking people for spellings; she replies that she "just figured it out." Some of her interactions with the researcher also reveal her increasing range of resources for spelling. After writing CARNIVAL conventionally, she asks if it is spelled right. The researcher asks how she knew how to spell it at this point when she didn't the week before. She replies that she had seen another child write it the day before and remembered. After writing RODE conventionally, she erases it and asks the researcher how to spell it. When asked to try herself, she says R-O-D-E and realizes she was right in the first place. She asks how to spell HAMMER, which is the name of one of the rides at the carnival. The researcher asks how she could find it; she looks on the list of rodeo words listed on a chart and when she can't find it decides to write ROUND-UP instead. She asks how to spell WHEN, wanting to know if the vowel in it is an A or an E. (In her own pronunciation, short e often sounds like short a, which is probably a Papago dialect influence.) When asked how she could find out, she gets a dictionary, skims through the W's and recognizes WHEN when she spots it. Although these interactions all reveal an attempt to rely on the researcher for spelling help, if that help is not forthcoming she has a variety of other resources to fall back on.

Figure VIII-29 Elaine's Text 11/16/82

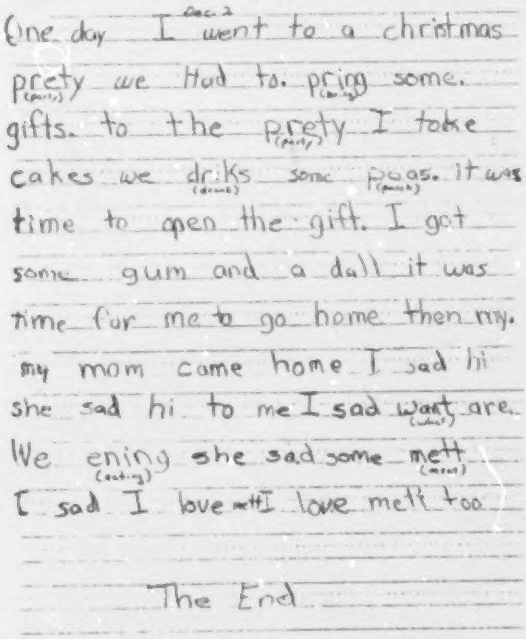


One day I went I wandt (wanted) of (go)
roed (ride) the round-up I got sared (scared)
afed (after) I roed (rode) the round-up I was
not sored (scared) aned (any) more. I got the
haring (hang) of it I Keeap (kept) ringe (riding) it
than I roed (rode) what my cangis (cousin)
she sad (said) hol (how) com (come) you dont roed (ride)
what u. on the fors (first) time I rod (rode)
be cost (because) I was sared (scared) me and my
boutre (brother) went home I mist (missed) the
carnival
The End

One day I wanted to ride the round-up .
I got scared .
After I rode the round-up I was not scared anymore .
I got the hang of it .
I kept riding it .
Then I rode with my cousin .
She said , " How come you didn't ride with us on the first time ? "
I said , " Because I was scared . "
Me and my brother went home .
I missed the carnival .
The End

Elaine's story from November 15 was written largely non-stop and silently. She was sitting alone with the researcher since her small group was working on something other than writing and the teacher had said we could remove her from the group in order to collect a story that day; she therefore had little chance for social interaction. In this story she returns to choosing to use invented spellings. When asked why, her answer is not very articulate, but it seems to be from a combination of having a lot to say and of writing just for the researcher rather than the teacher.

Figure VIII-30 Elaine's Text 12/2/82



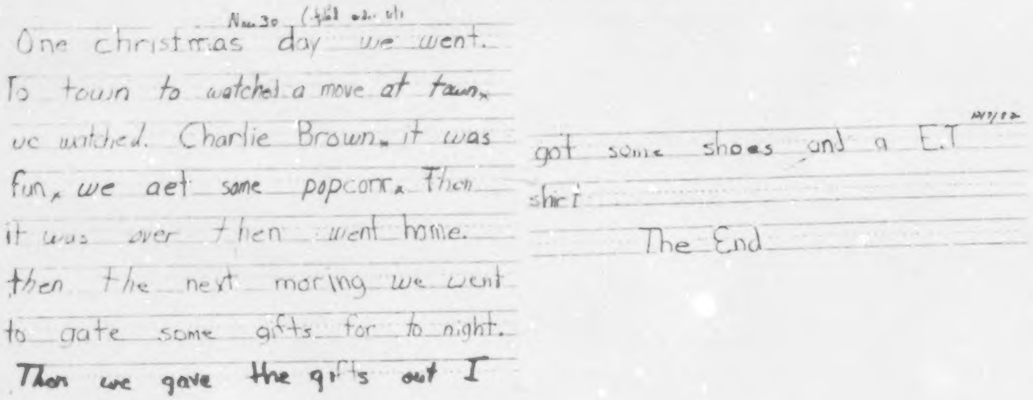
Dec. 2
One day I went to a christmas
prety (party) we Had to. pring (bring) some.
gifts. to the prety (party) I take
cakes we driks (drank) some poas (punch). it was
time to open the gift. I got
some gum and a dall it was
time fur me to go home then my.
my mom came home I sad hi
she sad hi to me I sad want (what) are.
We ening (eating) she sad some mett (meat)
I sad I love mett I love mett too

The End

```
One day I went to a Christmas party .
We had to bring some gifts to the party .
I took cakes .
We drank some punch .
It was time to open the gifts .
I got some gum and a doll .
It was time for me to go home .
Then my mom came home .
I said , " Hi . "
She said , " Hi , " to me .
I said , " What are we eating ? "
She said , " Some meat . "
I said , " I love meat . "
I love meat too .
The End
```

On December 2, the students were asked to write either a Thanksgiving or a Christmas story. Elaine wrote her story straight through, with virtually no interaction or other recorded behavior. Her few revisions were immediate ones on the single-letter level. She appears to be following an invented-spelling strategy here since she does not use any resources or ask for help. Although many words are spelled conventionally, they are mostly easy ones she usually controls.

Figure VIII-31 Elaine's Text 12/7/82



Nov 30 [illegible]

One christmas day we went.
To town to watched a move at tawn.
we watched. Charlie Brown. it was
fun. we aet some popcorn. Then
it was over then went home.
then The next moring we went
to gate some gifts for to night.
Then we gave the gifts out I
got some shoes and a E.T
shirt
The End

```
One Christmas day we went to town to watch a movie at town .
We watched Charlie Brown .
It was fun .
We ate some popcorn .
Then it was over .
Then we went home .
Then the next morning we went to get some gifts for tonight .
Then we gave the gifts out .
I got some shoes and an E.T shirt .
The End
```

On December 7, Elaine is somewhat restless as she writes. Her interactions and interruptions tend to last longer than usual and to be somewhat whimsical in nature. She was continuing with a story she had started on an earlier occasion, which may explain her difficulty in getting involved in it. Near the beginning of the session, she starts talking with the researcher about the observation process and why we only work with a few children. When told that we are trying for in-depth knowledge, she asks, "Do you know a lot about me?" Examples of her other behavior during this session include: whistling; teasing the researcher and telling a seatmate about it; looking for but failing to find a pair of scissors after a seatmate has asked to borrow some; singing "Babe, I love you," and asking the researcher about her house and car.

A Concepts of Writing interview was conducted with Elaine on November 9. She is very verbal in this interview and has extensive answers to most questions, although they often focus on external constraints and suggest a tacit deficit model about her own writing. She defines a good writer as someone who writes a lot; interestingly, the person she picks as a good writer is a child who is extremely inhibited and unadept as a writer. Elaine identifies him as a good writer because "I always see him writing." She does, however, say that to be a good writer one needs to know "what to write and <when to> put periods and question marks" and to have good handwriting, as opposed to bad writers, who "write sloppy." When asked how she could recognize a story of hers without her name on it, she says the absence of periods or recognizing mistakes she'd made would help her.

Her comments about spelling reveal an interesting constellation of attitudes. When asked how she figures out how to spell a word she doesn't know, she says she will "just spell it any way and then the teachers will correct it"; "they tell us how to spell it." When pressed, however, she admits that she also uses the dictionary and word lists to help her spell, and that she can often tell when words she has written are spelled wrong. When asked why spelling is important, she says that "they're going to ask you to spell something when you go to high school...and you're not going to know what it is and they're going to get mad." It's important for adults to spell correctly because "everybody's going to think that you <didn't> go to school and your mother doesn't care." We can only speculate as to whether these attitudes are related to the back-to-basics school that she had left only a week before this interview. There was also some discussion of spelling in her periodic interview a month later, where she reveals a more relaxed attitude. She says then that she decides to spell conventionally sometimes because "they think it's special and they want to read it," but that it isn't important "when you don't want to" unless "your boss tells you to spell the words right." She feels that a story doesn't need correct spelling to be good. She does, however, say in the same interview that her teacher would prefer a story with good spelling to a more interesting one with invented spelling.

Stories: November and December, Year II

The major theme that stands out in these five stories is that they all involve very personal content. Freed from the previous year's constraints of writing about topics which were not always relevant to her life, Elaine is able to move into concentrating wholly on the kind of partly-true, partly-fictional stories she had written in Year I as she turned stories about Saturn and bicycle safety into personal narratives. In comparison to last year, Elaine's compositions have begun to show a much stronger sense of story. All five of the stories from this first part of Year II have a clear chronological order; although a story may move episodically from one topic to another (e.g. the movement from a Christmas party to eating meat for supper on December 2), the events seem at least temporarily connected rather than disjointed.

The change in Elaine's story sense stands out very clearly when comparing this year's rodeo story (see Figure VIII-28) with one of last year's (See Figure VIII-2). In the earlier story, all that happens (in 101 words) is that various people go to the rodeo, go home, go to school, and get mad. In the more recent story, in 42 words she sticks to one character (herself) and has a clear series of varied events. (She stated in an interview, however, that Ms. Caldwell wouldn't like this story very much because "I keep going back and forth.") This story is also a nice illustration of the seamless blend of reality and fantasy that is typical of her stories. She almost certainly did go to the rodeo and carnival and ride the round-up, but was not the rodeo queen or a rider in the rodeo. In most cases, only knowledge of Elaine's life, not the story itself, lets the reader know how much of a story is true. Interestingly, her one story that is entirely based on her real life, the one from November 16 about being scared to ride the round-up, is the most unified, perhaps because its scope is defined by the logic of the incident rather than the range of her imagination. Elaine also stated in her interview sealing with this group of stories that this one was her favorite because "it's true...It's not fun if they're not true." She mentioned that it was the first true story she'd written. (She also said, in the same interview, that she liked the December 3 story about the Christimas party because it's NOT true.)

Ms. Caldwell, in discussing this group of stories, considered those from November 2, December 2, and December 7 as being roughly equivalent in quality. She felt that they all "followed an idea through" and were "consistent in a time sequence." She recognized them as stories that "could be imaginary but...could be based on real life," rather than being obvious fantasy or "a real dramatic story." She like the story about being afraid to ride the round-up a little less then these three, largely because it is simpler and less involved.

Syntactically, Elaine's sentences are not particularly long in this group of stories, with her number of words per T-unit hovering around six. While 16 of her 19 stories for Year I had between 1.0 and 1.3 clauses per T-unit, this group of 5 stories has a mean T-unit length of 1.3, indicating that she has begun to use subordinate clauses more often. (Hunt's data (1965) shows mean T-unit length for fourth graders as 8.6 words and 1.3 clauses.)

The most obvious pattern in Elaine's spelling in this group of stories is the choice she makes to invent spellings in some stories but not in others. The spelling in the story about riding the round-up is only 63% conventional, while that in the story about being in the rodeo is 95% conventional. The November 2 story has 38 invented spellings which don't follow any one particular pattern, although most of them are phonetically and/or graphically logical rather than being placeholder spellings (with the exception of corvifarov/carnival and palyean/pumpkin). When asked why she wrote M.S the way she did, with a period in the middle, she said it's because "they always do." On November 9, the only two invented spellings are a dialect-related one (stop for stopped) and one involving spacing (rodeoqueen). On November 16, she also had two invented spellings involving spacing; ANYMORE and BECAUSE were each written as two words. She also had some interesting spellings related to the -ED morpheme. She usually omitted or altered ED where it should have been present:

mist/missed
scaredy/scared
wandt/wanted

and also inserted it where it does not occur:

asfed/after

aned more/anymore
roed/ride or rode

The researcher discussed two of the invented spellings in this story with her. When OT for TO was pointed out to her, she recognized the reversal immediately and said that she hadn't noticed it before but that it was funny. When asked about the apostrophe in Caina's/cousins, she said that it's an "apostrophe s" which is used with people words with an S on the end. On December 2, several of Elaine's invented spellings involve the use of a single vowel in place of a vowel digraph or vice versa:

ening/eating
mett/meat
poas/punch
sad/said
toke/took

(Note that neither SAID nor TOOK is pronounced with the "long vowel" that is usually associated with digraphs.)

Elaine's punctuation in these stories follows the erratic pattern we saw to often in Year I; she omits but not always associated with capitals, and uses some conventionally. The only punctuation marks she uses are periods. On November 2, she does not use quotation marks or underlining for the movie title ANNIE, but interestingly does set it off with periods before and after. The researcher discussed punctuation with Elaine regularly during Year II in order to probe her knowledge of it. On November 2, she said she uses periods when there's a capital letter, including one after PILLY (pie) because it has a capitol in the middle, as indeed it appears to. She said that capitals are used at the start of a story. Although she has five periods associated with capitals in the story, she also has two words with capitals but no periods nearby and three periods with no capitals, two of which occur at the ends of sentences (as does the one after PILLY), and one at the end of a line. She is therefore far from consistent in applying her rules and indeed was not able to defend her logic very well when pushed to do so.

On November 9, Elaine was asked to explain how she knew where to put the five periods in the story where she did. (See Figure VIII-28.) Her reasoning was as follows: The first one is because it was the end of the first part. The second and third ones go with capitals. The fourth one is because the word is Rodeo (which was the word preceding the first period - she said the second occurrence of Rodeo didn't need a period because there already was one on that line.) The fifth period was because it was the end of the story. The researcher got the sense that these explanations were somewhat ad hoc and would not have held up well under probing.

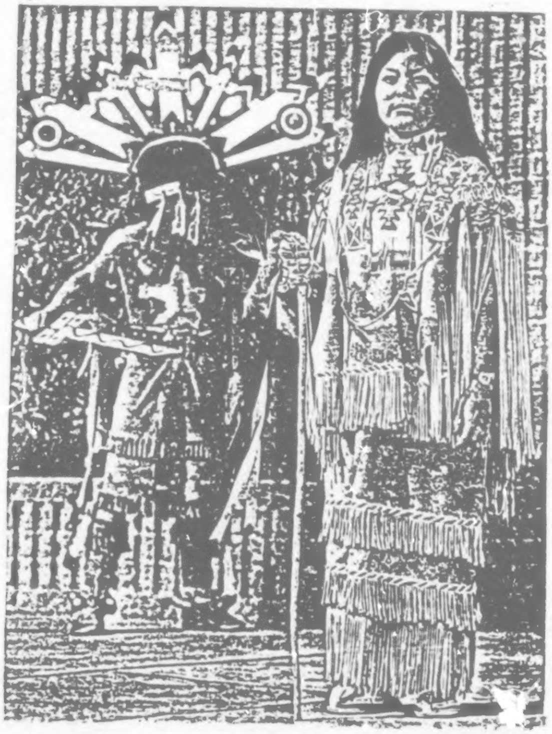
On December 2, when asked about periods she says first "it has to be capitals," but realizes after more questioning that this largely fails to explain her use of periods in this story. She eventually says that periods are needed to break the story up, and that it matters where they go but that she isn't sure where they go, which may be her best answer yet in terms of pinpointing her actual knowledge of the system. On December 7 she said again that she put periods where she did "because there's a capital"; when Enna and the researcher looked at the story together, however, only some periods were followed by a capital, so she decided to change lower-case letters to capitals after periods, which she did in some but not all places in the story. Note that in doing so she was following a slightly different rule, that capitals go after periods; she did not choose to insert periods before existing capitals. We will continue to follow the course of Elaine's development in punctuation over the rest of Year II.

Elaine had a total of fifty-four capitalization problems during these five stories. Thirty-seven of them were failures to capitalize where she had also failed to use a required period or quotation mark, so that these were sentence boundary rather than real capitalization problems.

Writing Process: January and February, Year II

In the 4 stories she wrote in January and February, Elaine experimented with 4 different genres.

Figure VIII-32 Picture Stimulus and Elaine's Text 1/20/83



1

the day the ~~we~~ came to town
One day the suoix came
to tmw. Becues they ware danceing
for the puleb. She had ~~x~~ fhtres
and a stuc. and dinzd rings.
and a flitre in her har. and
she was a good dancer. They live
way out in the destx. They live
in teppes They put dinzds on

2

the teppes thay ousc war
brisce the men war mowcsns and
buat of a brisce and holds a
stesc. a Fthres to he wars
bells to and. Penices his ram ~~X~~
And wars stesc on his had and
a bluck thing over his had.
and rinds on his Roms thay

3

are red und whit and fthres
on his mostesnc and bells
on his Top of the drces and he
Puts a star on his toscmc
and he wars a balt to. the bell
hat bells to and the drinces
has lathr hancing from the.
Princes he planice the

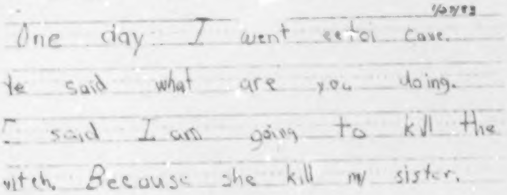
4

thing on his had and has.
Fthres on the ridns.
The End

The Day the Sioux Came to Town
One day the Sioux came to town because they were dancing for the people .
She had feathers and a stick and design rings and a feather in her hair ,
and she was a good dancer .
They live way out in the desert .
They live in tepees .
They put designs on the tepees .
They always wear dresses .
The men wear moccasins and the bottom of a dress and hold a stick .
Feathers , too .
He wears bells , too , and paints his arms , and wears sticks on his head and a black thing over his head , and ribbons on his arms .
They are red and white .
And he wears feathers on his moccasins and bells on the top of the dress .
And he puts a star on his stomach
and he wears a belt , too .
The belt has bells , too ,
and the dress has leather hanging from the dress .
He paints the thing on his head and has feathers on the ribbons .
The End

In January, Ms. Caldwell's class spent time on a unit about Native people. Although they were not required to write on this topic, many of the students chose to, and there were related story-starter materials available in the room. Elaine began working on this story by choosing a picture of a Native man and woman in traditional Plains costume (see Figure VIII-31). She was very excited about the picture and about writing a story based on it. She refers constantly to the picture as she writes, particularly at points where she needs new information to write about. She is extremely involved in her writing and has few interactions with other children during the story. At one point she brags to Molly about how long her story is going to be, but a few minutes later she rejects an attempt by another child to interact with her. She shows no concern with having correct spelling, and never asks for a spelling or uses a dictionary.

Figure VIII-33 Elaine's Text 1/27/83

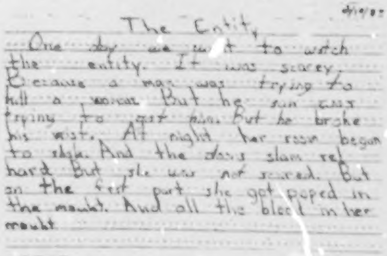


One day I went eetoi Cave.
He said what are you doing.
I said I am going to kill the
witch. Because she kill my sister.

One day I went eetoi cave .
He said what are you doing .
I said I am going to kill the witch . Because she kill my sister

On January 27, the class was continuing with the unit on Native Americans and had been reading Papago legends. Like many of the children, Elaine chose to write about Ee'toi, the Papago culture hero. Other children in her group were looking at legend books as she wrote, and she spent some time talking with seatmates about the books and looking in one to find the spelling of a word. One reason for this story being so short is that Elaine chose to spend a lot of time looking for words in the dictionary. She uses two different dictionaries at one point or another, an easy Dr. Seuss picture dictionary and a somewhat more advanced Weekly Reader one. An example of her dictionary use will give an idea of her strategies. Elaine writes STERIS on the back of her paper as an attempt at SISTER then decides to look in the dictionary for it. She starts reading all the S words, then settles down to scanning them, pausing on possible ones like SCISSORS and SERIES, which she attempts to read to see if they're it. After going through about 10 pages she finally finds SISTER. It can be seen from this that her dictionary strategies are not at all efficient yet. She operates mostly from an initial-letter strategy, although when asked if there's a shorcut she may think of coming up with a second letter. When looking for the word WENT she decides it starts with WA; when she can't find it there she is unable to generate any alternative spellings. It should be noted that although her dictionary strategies are not highly developed, Elaine clearly enjoys using the dictionary to find words; her skill will develop as she continues this kind of self-initiated practice.

Figure VIII-34 Elaine's Text 2/10/83

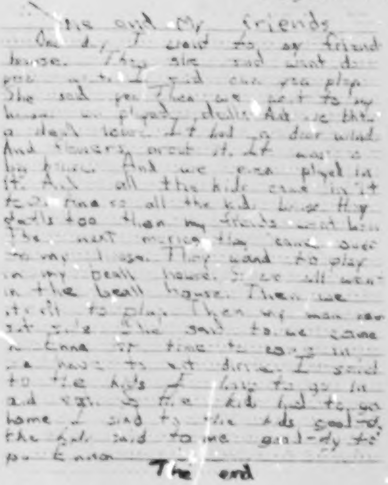


The Entity
One day we went to watch * The entity .
It was scary because a man was trying to kill a woman .
But her son was trying to get him ,
but he broke his wrist .
At night her room began to shake
and the doors slammed real hard .
But she was not scared .
But on the first part she got popped in the mouth ,
and all the blood was in her mouth .

On February 10, the class was working on a research writing unit, but Elaine chose instead to write about a movie that she'd seen. (The children always had this option of free-choice writing.) She uses the dictionary several times, but three of those times she decides partway through that she already knows how to spell the word and just writes it, one time conventionally (WOMAN) and twice not (SLAM for SLAMMED and POPEP for POPPED). When using the dictionary to find BROKE, she asks the researcher if it has a BR and then reads every word in the dictionary starting with BR in order to find it. She also uses her knowledge of the alphabet to help her with dictionary use; at one point she sings A,B,C,D and at another point she looks at the alphabet chart on the board to help her with alphabetical order. These examples suggest that Elaine is beginning to integrate her strategies for figuring out how to spell words.

On the afternoon of February 10, Elaine wrote her one personal narrative of this group of stories, though it is appreciably longer than her previous narratives and is, in fact, her longest story of the 2-year period. In the early part of the story, she uses the dictionary four times to look for words. Her strategies continue to be more time-consuming than necessary, often involving reading all words beginning with a particualr letter. When using the Cat in the Hat dictionary to look for WINDOW, although all words are illustrated by pictures she reads all the words from the beginning rather than looking for a picture of a window. Later on in the story she decides not to take the time to focus on spelling and doesn't use the dictionaries anymore. She also uses a resource to help her with letter formation; she had written BIG with a D, but then looked at the alphabet chart on the wall to see if it was reversed and fixed it. (She did, however, leave reversed letters in BEALL (doll) and GOOD-DY (goodbye).

Figure VIII-35 Elaine's Text 2/10/83B



Me and My Friends
One day I went to my friend's house .
Then she said , " what do you want ? "
I said , " Can you play ? "
She said , " Yes . "
Then we went to my house .
We played dolls
and we built a dollhouse .
It had a door window and flowers around it .
It was a big house ,
and we even played in it ,
and all the kids came in it , too .
And so all the kids brought their dolls , too .
Then my friends went home .
The next morning they came over to my house .
They wanted to play in my dollhouse ,
so we all went in the dollhouse .
Then we started to play .
Then my mom came outside .
She said to me , " Come in , Enna .
It's time to come in .
We have to eat dinner . "
I said to the kids , " I have to go in and eat . "
So the kids had to go home .
I said to the kids , " Good-by . "
The kids said to me , " Goodby to you , Enna . "
The End

Stories: January and February Year II

The four stories are very different from each other, and include (goodbye) a descriptive piece, a legend, a movie plot summary, and a personal narrative. The January 20 piece describing the Sioux dancers was an occasion where Elaine used a picture to create meaning. She began it as a a story but was very quickly caught up in the excitement of trying to describe the picture in as detailed a manner as possible. Because she is attempting this genre for the first time, there are some cohesion problems resulting from exophoric reference and the piece doesn't have any particular internal logic, since she wrote about aspects of the picture as they struck her eye. This is her favorite story in a group of five she compared it with, and possibly her favorite story of the whole year - after she was finished writing, the researcher made her a photocopy of the picture, and four months later her mother mentioned that she still had it hanging in her room. Her strong feelings about this story are directly related to her own identity as a Native person; she said she liked this story because it's about "the Papago people, the tribe." Interestingly, Ms. Caldwell chose this story as the least successful in a group of 8. Her comments include: "She didn't follow a sequence...she more or less described the picture but not in any certain order...I think the picture really distracted her." She does, however, realize how excited Elaine was about it, and realized that it would be a good prospect for editing. The contrast between Elaine's feelings about this story and an adult reader's reactions suggests that periods of intense growth for a writer may not always be reflected immediately in a superior product; new processes need to be explored before they can be integrated.

The January 27 legend is really just a beginning rather than a full story, largely because Elaine spent so much time with the dictionary. Neither Elaine nor Ms. Caldwell likes it particularly; Ms. Caldwell really wishes she'd done more with it "because most of the other <stories> have been life situations...<but this> seemed to be a little bit more fantasy or creative."

Elaine's retelling of the movie "The Entity" is not particularly effective as a movie summary because she is reporting on the incidents that struck her most rather than trying to give a complete account of the story. It is Elaine's second favorite story for this group; she likes it primarily because she liked the movie, and feels it's basically a funny story rather than a serious one. Ms. Caldwell wasn't sure how to evaluate this piece since it doesn't have a standard story line, but she does feel it's an effective movie review since it convinces her she wouldn't want to see "The Entity"!

Elaine's story about ME AND MY FRIENDS is reminiscent, in its episodic structure and limited variety of action, of many of her earlier stories. The action of the story consists mostly of going to people's houses and home again, and playing. Interestingly, Elaine and her teacher again had different reactions. Elaine liked this story the least of the group of five, apparently because it's just about playing. By contrast, it is Ms. Caldwell's favorite of eight. She comments: "This one I thought hung together pretty logically and consistently....It has a good story line...She kind of stuck by a theme."

Syntactically, these four stories show a fair degree of sophistication. All four have more clauses per T-unit than the average for Year II, and all but the last one have more words per T-unit than the average. (The piece about the Sioux has the highest words per T-unit of any story by Elaine in both years.) It is interesting that she was able to achieve this level of syntactic complexity even while she was experimenting with new genres.

Except for the story about the Sioux, the stories in this group have more conventional spellings than the average for Year II, which is not surprising considering the extensive use she made of the dictionary in all but the Sioux story. That story is a treasure-trove of invented spellings, since she was using many new and unfamiliar words and had chosen to write quickly with little concern for standard spelling. Some of the spelling patterns observed are:

failure to begin with the correct initial letter (which is very rare in any of the children's writing):
- ousc/always (related phonetically to ought)
- rum, roms/arms (use of letter naming strategy)
- toscmc/stomach

placeholder spellings: (with occasional sound/letter correspondences)
- dinzd/design
- mosteanc/moccasins
- penices/paints (a personal favorite of this researcher!)

reversals:
- becues/because
- batl/belt
- bumt/bottom
- suiox/Sioux
- tnow/town

The short story about Ee'toi's cave has only two invented spellings, both related to morphological features (eetoi/Ee'toi's; kill/killed).

In the story about the "The Entity," there are several phonetically-based spellings:

- frst/first
- gat/get (dialect influence)
- rel/real
- shak/shake
- slam/slammed (dialect influence)
- sun/son

Elaine also showed some evidence of her developing knowledge of morphemic features. When ready to write the word SCARY, she looks it up in the dictionary with her friend Kim. They find SCARE and Elaine adds a Y for the endings, producing SCAREY, and says "Just take off the Y and add a D!" This is expecially interesting in light of how little control of the -ed morpheme she has had up until now.

When Elaine had finished writing ME AND MY FRIENDS, the researcher discussed some of her spelling with her. (This discussion was captured on videotape.) When shown the sequence WANT DO YOU WANT (for "What do you want?"), she realizes right away that the first and last words are supposed to be spelled differently, and at first says that both are wrong. She then writes both words (conventionally) on another sheet of paper, and realizes that one was right after all. She finds the whole episode very funny! She also discussed her spelling strategies in general; she states that when she has chosen not to aim for totally conventional spelling in a story, she will often decide with a word she doesn't know to "just write it down any way," in other words, to use an invented spelling intentionally. She points out dealls/dolls and dirrie/dinner as examples of words she decided not to look up and knows aren't right. This discussion certainly confirms our impressions of the role that her placeholder spellings play. It also confirms the conclusion that her competence in spelling is greater than what her spellings viewed in isolation would suggest. She clearly knows when she used an invented spelling intentionally and is often able to recognize non-deliberate invented spellings. This knowledge, combined with the evidence from this and other stories that she is able to use dictionaries and other resources, suggests that she is likely to have a fair degree of success with editing for spelling on her own.

The most interesting aspect of Elaine's development during this time period was the dramatic change in her understanding and use of sentence boundary punctuation.

On January 20, the researcher had a discussion with Elaine about where she had used periods in her story. (In this story, some were at ends of T-units or at least between clauses, but others, particularly later in the story, were at the ends of lines or before capitals.) The field notes from this discussion read:

> We talk about periods; she says they come at the end of a sentence. We look at her use of periods and capitals; she doesn't know (even after much discussion) why she didn't always use capitals when there are periods. On being asked, she's pretty sure a capital is obligatory with a period, but not entirely convinced. I read aloud part of her story and ask her to tell where the sentences end. She knows that "She had. . . . good dancer" is all one sentence; when I show her the extra periods in it, she knows immediately that they're wrong. She mentions that you can tell where sentences end because otherwise when someone reads a story it just runs on and on.

On January 27, Elaine's periods are basically all in the right places, except for one between clauses (although one of them should have been a question mark). She seems confident about where they go; when asked about this new mastery, she says that she figured it out herself, that Ms. Caldwell didn't teach her. (Possibly the interaction with the researcher the previous week was also an influence.) Elaine's control of punctuation continued on February 10. The story about THE ENTITY has periods at the end of every T-unit, plus one between clauses. In ME AND MY FRIENDS, 21 of 25 T-units end with periods and only one period is inserted elsewhere. Her overall percentage of conventional punctuation on this story is low (29%) only because a large number of quotation marks and accompanying commas are missing. Our observations during the story again suggest that she feels very much in control of sentence-boundary punctuation.

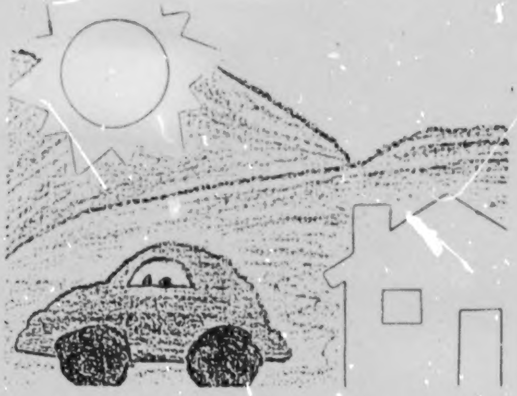
We also have data relating to how much Elaine is able to articulate about punctuation. On February 10, the researcher asked her to draw and describe any "little marks" other than periods that she knew. She called the exclamation point a question mark and said it's used for a question. She called the question mark a statement and said it's for "when it's telling you something." She could identify a comma but didn't know when it's used. In the whole two years of the study, Elaine uses 207 periods, 1 comma, and no other punctuation, so it isn't surprising that she can articulate only very limited information about most punctuation marks.

However, her knowledge about how to use periods has changed tremendously, as revealed in her interview of February 17. She doesn't know how she learned how to use them, and says that she "just knew," but she can explain where they go: "When the sentence is over...if you don't stop it's just going to keep going." She doesn't have a precise rule like her old one about periods and capitals going together; she is able rather to draw on her tacit knowledge about sentence structure and to feel comfortable and confident about punctuating by intuition. Looking back at earlier stories, she knows where they should have been punctuated and realized that she's learned since then. Although she says that her teacher didn't teach her how to do this, our April 7 interview with Ms. Caldwell suggests that there was indeed some teacher input. She describes what she did with Elaine on occasion: "<I would> have her read it and find the natural pause...and try to see where the period would go." It appears that at some point a combination of Elaine's tacit knowledge of language, teacher input, and possibly increased awareness due to interaction with the researcher just clicked, because there is a dramatic change after January 20 - she has abandoned her "periods go with capitals" rule and is operating out of not a perfect but a clear sense of where sentence boundaries are.

Writing Process: April, Year II

On April 7, Elaine wrote two stories based on drawings she'd done. The children had made pictures by tracing around templates of various shapes; her first one showed a house, a car, and the sun. Elaine writes this story very quickly, using a tiny pencil that she had sharpened down almost to non-existence. A fire drill occurs after she had written the first line of the story, but after the class comes back from it Elaine doesn't interact with other children at all but concentrates on getting her story written. She uses the dictionary twice to find words, but then chooses not to use it anymore because she gets tired. This is, of course, related to the fact that dictionary use is not a very efficient process for her; she enjoys using the dictionary but can't find words very quickly. One of the words she looks for in this story was BRIGHTING (an original coinage); she first looks at the alphabet chart on the wall to see which way B faces, then started skimming through the B'S. At BR she begins to read every word, and when she reaches BRING she says "That's it." When asked how she knew, the reply is "It has a BR and an ING."

Figure VIII-36 Elaine's Text 4/7/83

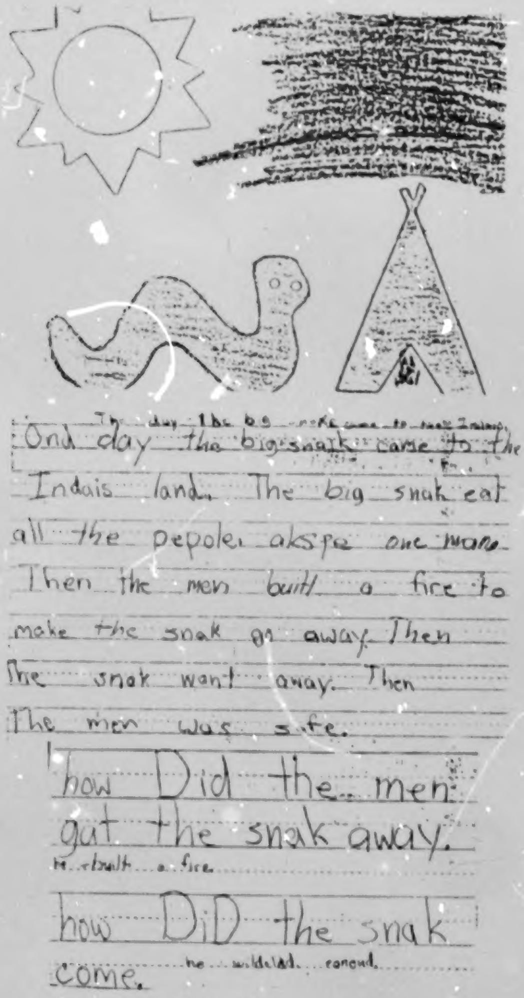


One day the sun came up. Me and
Monica were going to twon. Then the
sun was up And it was bring in are
eyes. Then we con't see and we
almots went of the rode. Then we stered
to cry. But we crosted. Then the
plicea came And the ambelens. And we
got in the haptilol so that's hold it
all hapend.

The End

One day the sun came up .
Me and Monica were going to town .
Then the sun was up .
And it was brighting in our eyes .
Then we couldn't see
and we almost went off the road .
Then we started to cry .
But we crashed .
Then the police came . And the ambulance .
And we got in the hospital .
So that's how it all happened .
The End

Figure VIII-37 Elaine's Text 4/7/83B



The day the big snake came to the Indians

Ond day the big snak came to the Indais land. The big snak eat all the pepole. akspe one man. Then the men built a fire to make the snak go away. Then the snak want away. Then The men was safe.

how Did the men gat the snak away.

He built a fire

how DiD the snak come.

he wildelad around

The Day the Big Snake Came to the Indians
One day the big snake came to the Indians' land .
The big snake ate all the people , except one man .
Then the man built a fire to make the snake go away .
Then the snake went away .
Then the man was safe .
How did the man get the snake away ?
He built a fire .
How did the snake come ?
He wiggled around .

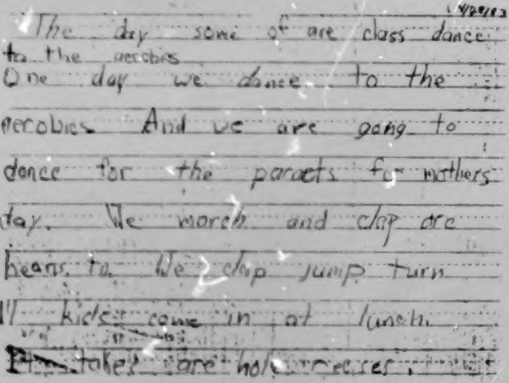
That afternoon Elaine writes a story about a picture which showed a tepee, a snake and the sun. She is not very interested in writing it and spends a lot of time talking with other children, sometimes for up to 5 minutes at a time. Twice as she writes, she runs out of ideas; on one of these occasions a seatmate reads her story up to that point and suggests the next sentence. On the other occasion, the researcher asks a question that sparks an idea or two. She finishes the story with two questions and answers; Ms. Caldwell had introduced into the post-writing sharing time an opportunity for students to ask questions about their story to the class.

Figure VIII-38 Elaine's Text 4/14/83

One day we went to the University of Arizona .
We went to Miss Vaughan's house .
Then she showed us all around her house .
Then we went to Miss Kasten's house .
Then we ate .
Then we went to go swimming .
Then we had to go back to Miss Vaughan's house .
Then we had to go to sleep .
Then we got up and went back to Sells .
The End

On April 14, Elaine and the other subjects of the study had just come back from an overnight trip to Tucson with the researchers, which provided an obvious writing topic. The variety of resources that Elaine has developed for figuring out how to spell words is much in evidence here. She finds UNIVERSITY in the dictionary; spots ARIZONA on a poster; uses the Dr. Seuss dictionary to find HOUSE (but without using the picture); sings A,B,C,D to figure out where S would be in the dictionary; and tries out spellings on scrap paper.

Figure VIII-39 Elaine's Text 4/28/83



4/28/83
The day some of are class dance
to the aecobis
One day we dance to the
aecobies And we are gong to
dance for the paraets for mothers
day. We march and clap are
heans to. We clap jump turn
14 kids come in at lunch.
takes are hole recess.

The Day Some of Our Class Danced to the Aerobics
One day we danced to the aerobics .
And we are going to dance for the parents for Mother's Day .
We march and clap our hands , too .
We clap , jump , and turn .
14 kids come in at lunch .
It takes our whole recess . The End

On April 28, Elaine isn't sure what to write about at first. The researcher asks what she's been doing that week that would be fun to write about. She says "Aerobics." The class has been practicing an aerobic dancing routine for a parent assembly. She spends a lot of time interacting with other children and using the dictionary during this story. Her dictionary strategies are continuing to increase in efficiency and sophistication; after looking up PARENT, she returns to it to see how to spell MOTHER, which she'd read in the definition. She also mentions that Ms. Caldwell has taught her to use the first 3 letters when looking for a spelling, and uses that strategy consistently.

Stories: April, Year II

Three of these stories are quite personal. The April 7 story about ME AND MONICA GOING TO TOWN is reminiscent in content of her bicycle safety story from Year I. She uses her very simple picture as a starting point and quickly develops a strongly plotted story; her sense of story structure is shown by her final sentence, "So that's how it all happened." Elaine likes this story least of a group of four, but mostly because the subject matter is sad. Her teacher likes it best out of that same group; she feels it's both creative and realistic and likes the use of detail; "If you live out here and you go to town in the morning, that's what happens. The sun gets in your eyes."

Elaine was interviewed twice during this period. In her periodic interview on April 28, she continues to choose her favorite stories based on what they're about rather than on any measure of quality as a story. When pressed to discuss further why particular stories are good, her comments include; "because I put the periods and capitals where they go"; "I spelled the words right"; "it's about Indians and it sounds good"; "I liked how I wrote it." Although she feels that her teacher would also value stories according to their content (e.g., like a happy one better than a sad one), she says that Ms. Caldwell would prefer a boring story with good spelling and handwriting to the reverse, and that the former would be a better story.

Her writing concepts interview of April 14 reflects similar attitudes. A good writer "can write straight"...knows how to "put the periods and capitals where they go...That's all." As in the two previous interviews, she says that bad writers "write sloppy." Her discussion of spelling is far more sophisticated than ever before, reflecting her growing range of strategies and control of the process. Whenl asked how she figures out how to spell a word, she includes; "go get a dictionary and look it up...ask someone...try to sound it out...try to get it in your mind...write it on a piece of paper and you write the words that you think that goes in there." Even more importantly, her perception of the importance of spelling has changed from a social approval one to a functional one: "because if somebody tries to read your story they're not going to know what it says <if the spelling is unconventional>."

That afternoon, in writing about the snake, Elaine returned to one of her earlier interests - Native American content. She enjoyed writing the questions, one of which could be answered from the story and one of which couldn't. Ms. Caldwell commented that when Elaine read the second question to the class, they "gave her all kinds of answers and she said no to all of them. And then finally they said, 'You didn't tell us!'"

Both the April 14 and the April 28 stories are true personal narratives based on current events in Elaine's life. The one about the trip to the university is her favorite of this group, primarily because of what it's about. Ms. Caldwell commented that this one is not particularly successful as a story because of trying to cram so many events in. Elaine comes up with just a list, with little emotional content. Elaine has commented in interviews that she prefers imaginary stories to true ones, but in both of these she stayed with true events rather than moving into fantasy.

Elaine continues to use a variety of invented spellings. Some of the types found in these stories are:

homophones	rode/road
	are/our
	to/too
	hole/whole
reversals	ranoud/around
	eat/ate
	almots/almost
	twon/town
	buitl/built

The class had spent some time studying homographs and homophones in April; this is usually done with the purpose of making childen aware of them so they won't confuse them. Elaine was aware of what homophones are but continued to use them as invented spellings. Another interesting spelling in this group is CON'T for COULDN'T in the first April 7 story. This spelling is visually similar to CAN'T, but is also perhaps closer to Elaine's pronunciation than the standard spelling is, since speakers of Papago English tend to replace some stops with glottal stops.

On April 14, when Elaine looks for the spelling of UNIVERSITY, she comments that it starts with UN, ends with Y, and has a V in it. This provides an interesting parallel to her placeholder spellings. (discussed in the summary of Year I above), where she tends to get the first letter or two and the final letter correct, and to include one or more of the other consonants but in no particular order. This suggests that the visual strategies she uses in spelling many remain fairly consistent whether she is inventing spellings or looking them up.

Elaine's use of punctuation continues to be quite proficient in April. Although she doesn't use question marks or commas yet, in the

Table VIII-10 Punctuation Data Sheet: Elaine Year I

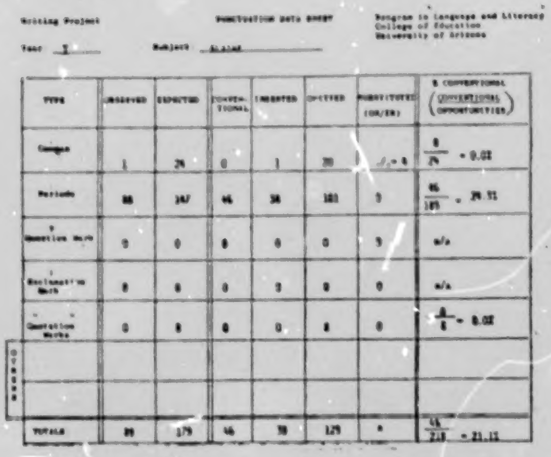


Table VIII-11 Words per Story: Elaine Year II

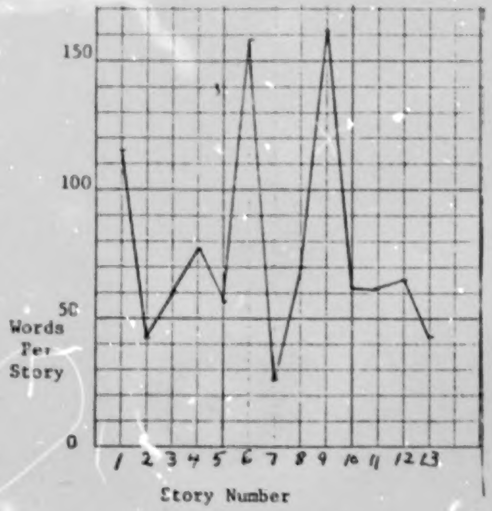


Table VIII-12 Words per T-Unit: Elaine Year II

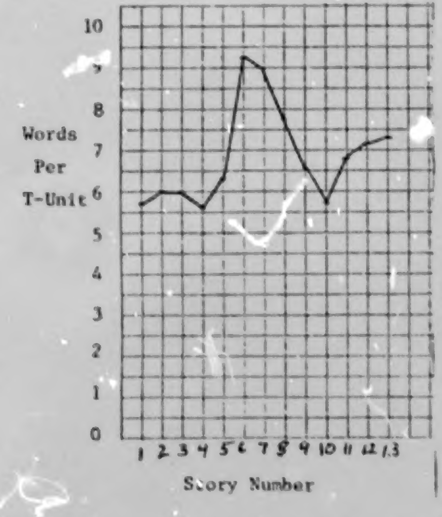


Table VIII-13 Clauses per T-Unit: Elaine Year II

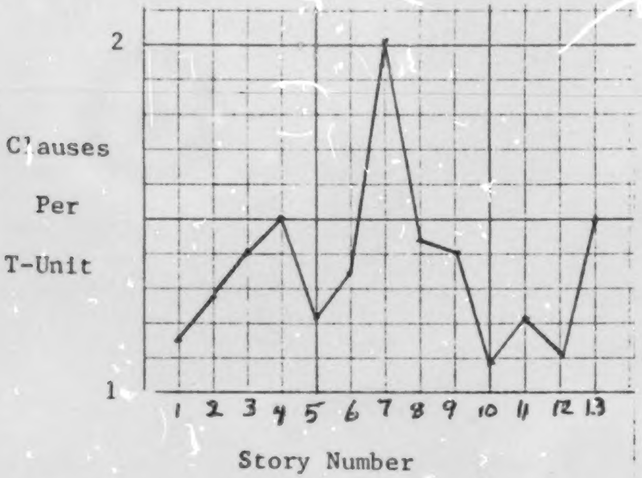
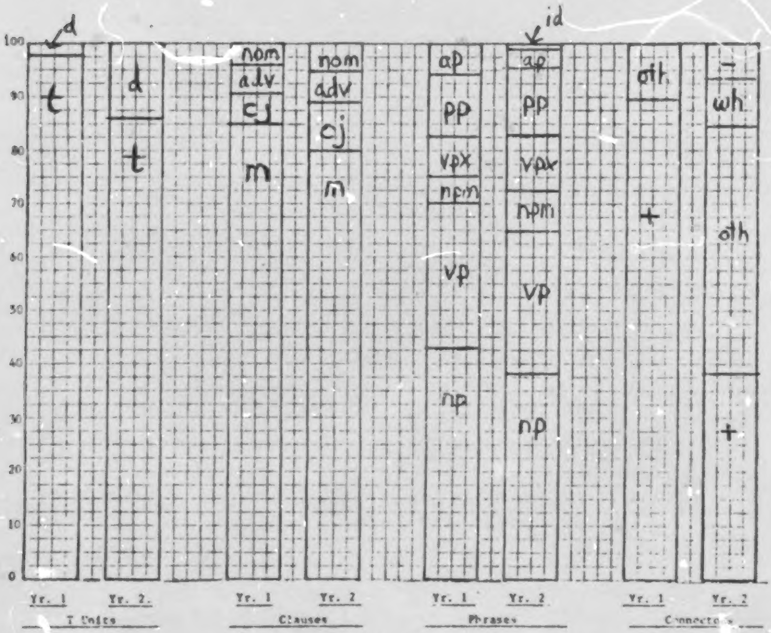


Table VIII-14 Syntactic Development: Elaine Years I and II



vast majority of cases, periods are where they belong - in fact, the April 14 story has 100% conventional punctuation. After she had finished writing the first sentence of that story, she read the whole thing aloud and said, "Period!", suggesting that she is beginning to automatically think of periods when finishing a sentence.

Her use of capitalization continues to improve along with her punctuation, since it is also part of sentence boundaries. Some of her comments to the researcher reveal her concepts and awareness of capitalization. On April 14, she asked if ARIZONA "has to have a capital." and decides yes, because "it's our state." When asked about some of her extra capitals in the story about the snake, she said she had capitalized two THE'S, which were both at the beginning of lines, because she thought they were the start of a sentence; she put capitals in DID because she "just wanted to."

Summary Year II

The sense of ownership of her writing that Elaine had developed during Year I continued throughout Year II. Since writing was always unassigned in Ms. Caldwell's classroom she was free to develop topics and genres as she saw fit. Elaine began the year by writing in her most common genre, fictionalized personal narrative, but explored a variety of other types of writing as the year went on.

Elaine's syntactic development during Year II can be looked at across several parameters and compared to that of Year I, as shown in Tables VIII-11 through VIII-14.

In Year II, the length of Elaine's stories varies quite a bit (see Table VIII-11), but she doesn't have as many shorter ones as in the first year. Her stories range from 27 words about EE'TOI'S CAVE to 163 words for ME AND MY FRIENDS. Her mean story length is 81.7 words and her median 63 (compared to 56.8 and 49 respectively in Year I). One of the most important factors affecting story length is the trade-off between focus on spelling and focus on meaning creation. When Elaine spends a lot of time looking in the dictionary and using other spelling resources, her stories tend to be shorter, although she has only 2 stories with fewer than 50 words this year, as compared to 10 in Year I. When she ignores spelling because she has a lot to say, she has more time for writing. Elaine's words and clauses per T-unit continue to vary quite a bit from story to story (see Tables VIII-12 and VIII-13), although both her averages and her peaks are higher than in Year I.

Table VIII-15 Syntactic Change: Elaine Year II

	First Half	Second Half	Overall	Overall Year I
Words/T-Unit	6.63	6.86	6.74	5.80
Clauses/T-Unit	1.31	1.33	1.32	1.16

These figures do not change much from the first half to the second

Table VIII-16 Percent Conventional Spelling: Elaine Year II

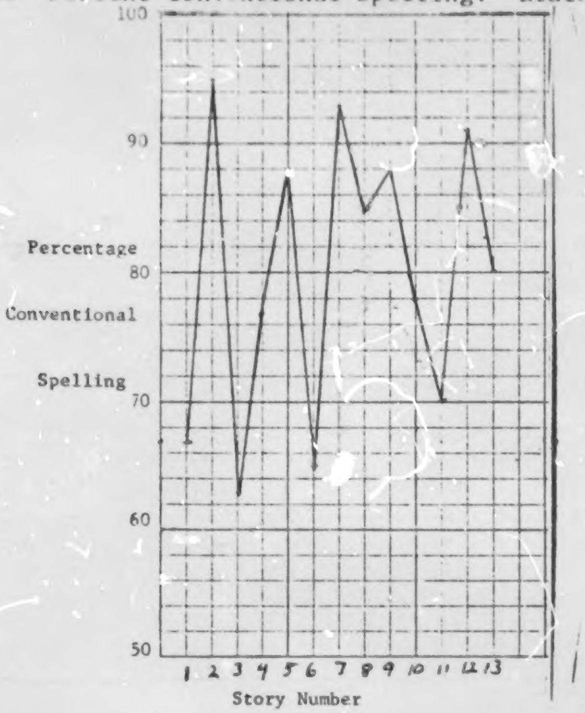
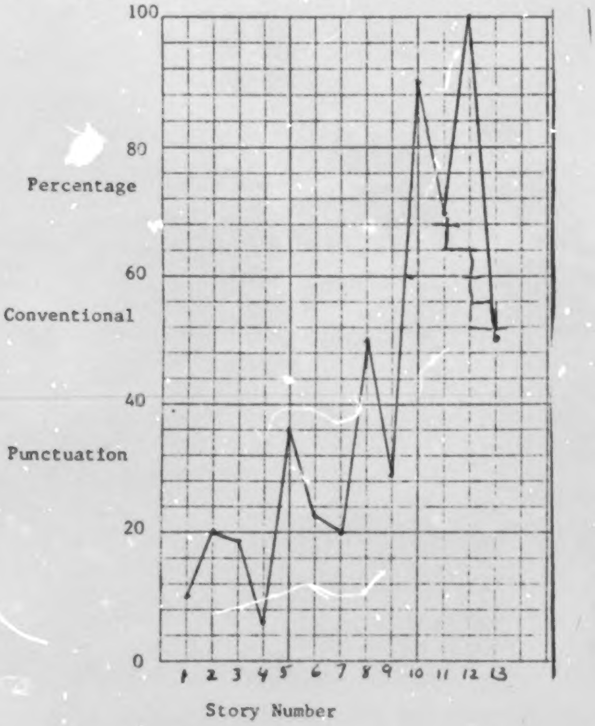


Table VIII-17 Percent Conventional Punctuation: Elaine Year II



half of Year II but do show an increase from Year I to Year II. (Hunt (1965) shows figures of 8.6 words per T-unit and 1.3 clauses per T-unit for fourth graders.) Table VIII-14 compares the kinds of syntactic structures Elaine used in each year. It is clear that Elaine has begun to use more types of syntactic structure at all the linguistic levels shown. She uses dialogue 13% of the time rather than 6%; she uses subordinate clauses 21% rather than 15% of the time; and she uses expanded noun and verb phrases 32% rather than 30% of the time. All these syntactic measures confirm the impressions gained from reading the stories that Elaine is becoming more sophisticated as a writer.

Elaine's orthographic development is reflected in Tables VIII-16 and VIII-17.

Of 1062 words Elaine wrote in Year II, 828, or 78.0%, were conventionally spelled, as opposed to 80.1% in Year I. The first half of the Year II, 72.1% were conventionally spelled, while 83.9% were in the second half. As in Year I, the variations from story to story as well as the overall averages reflect the interaction of competence and intentions. When Elaine chooses to focus on spelling, she is able to spell 80% or more of her words conventionally, while at other times she chooses a different focus and has more invented spellings.

As in Year I, Elaine tends to spell high-frequency words conventionally.

Table VIII-18 High Frequency Words: Elaine Year II

Word	Frequency	Conventional	Invented
the	85	85	0
to	60	59	1
we	44	44	0
and	42	42	0
I	38	38	0
then	29	26	3
went	28	27	1
a	25	25	0
was	24	24	0
it	18	18	0
in	17	17	0
day	16	16	0
said	16	9	7
my	13	13	0
one	13	12	1
she	13	13	0
came	10	10	0
go	10	10	0
on	10	10	0
he	9	9	0
	520	507	13

These 20 words occur a total of 520 times, making up 48.9% of all words used by Elaine in Year II. Thirteen of these, or 2.5%, are invented spelling (seven of these are the spelling SAD for SAID). Her remaining 221 invented spellings occur on the 262 other different words which make up 51.1% of her writing.

One of the most dramatic changes in Elaine's writing in Year II is, of course, her new mastery of sentence boundary punctuation. As dramatic as the graph in Table VIII-16 is, the actual change is even more abrupt. The turning point was between the January 20 story about the day the Sioux came to town and the January 27 one about Ee'toi's cave. During that week she "got the hang of it," in her terms. If one divides Year II stories at that point and looks at sentence boundary punctuation only (counting a period substituted for a question mark as correct, since it is at least in the right place), she leaps from an average of 23% correct to an average of 75% correct. This is a truly saltatory change; an earlier mode of operation has, rather than changing gradually, been replaced suddenly by a new and more mature process.

CHAPTER IX - DANA

by Wendy Kasten

Background and Personal Data

The fact that Dana's entire wardrobe of shirts to wear to school have insignias of a basketball or baseball teams is not an accident. Dana loves sports and this is reflected in many areas of his life. He chooses to write sports stories when given an opportunity to choose anything he wants to write about. Talking with Dana will reveal a considerable knowledge of football and basketball leagues in this country as well as specific information about teams and favorite players. His mother reports that he follows sports stories, scores and other related information in the newspaper and on television regularly.

Dana does have another interest which he is not quite as zealous about but seems to thoroughly enjoy. He enjoys the science fiction, Star Wars mania of his generation. He often asks to stay home to watch space launches on television when they occur. Dana is no stranger to video games. His favorite game, TRON is a space related game. He admits that his highest scores are in TRON, but he also likes PAC-MAN, DONKEY KONG and others.

Dana lives in one of the many small villages on the reservation a long distance from the town where he goes to school. His village is reputed to be an attractive, desirable one and is closer to Tucson than many locations on the reservation. Dana has one sister, about three years younger. His father works for the tribal council and his mother works at home. Both languages, English and Papago, are spoken in the home although English is used primarily. His mother speaks Papago when conversing with the grandparents, who only speak Papago. When asked, Dana will reply that he does not know much about the Papago language. But interactions with him suggest that he knows somewhat more than he realizes, especially as far as receptive control over Papago is concerned. He does not normally attempt to speak Papago, according to his mother, but recently has shown some interest in knowing how certain things would be said.

Dana's mother reports having read to Dana from an early age. She relates that he was always interested in books and loves to read. He plays school with his older cousins and spends hours filling in old workbooks. When the family is shopping together, Dana frequently asks to buy books that include comics. He then reportedly reads his newest acquisition all the way home in the car. His mother also relates that Dana will beg his father to buy the newspaper when they are out. Dana reads various parts of the newspaper, but reads the sports section most thoroughly.

Dana writes at home. He writes about sports events he has seen on television, sometimes keeping track of the play-offs. One year, Dana kept a diary on a regular basis. He also writes letters to his mother,

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informational pieces about space, and pieces about ball games.

Dana's knowledge of Papago culture and Papago stories comes primarily from contact with a great-grandparent when he was young and from what he has learned in school. Dana's mother expressed that she learns about Papago culture from what her son brings home from school.

In school, Dana is a kind of student that many teachers wish they had more of. Dana enjoys the routine and the work of the classrooms. In fourth grade, Dana received the class academic award. He is careful and precise, always handing in papers that appear neat and well done. Dana erases frequently in an effort to be correct and shudders at the thought of ever having to do anything over again.

Dana tried to be nonchalant as the researchers entered his classroom throughout the study. But the grin on his face partially hidden behind the hand-held pencil in his mouth revealed some of his enjoyment at the attention from the researchers. Somewhat leaner and smaller than his peers, Dana's feet didn't reach the floor as he sat in the fourth-grade sized chairs. He seemed to delight in swinging his legs back and forth rhythmically, giving his posture a slight bounce as he completed his assignments.

At recess, Dana was somewhat reserved. Although he seemed to be well liked and well respected by his peers, he did not seem to have strong attachments to group membership. Dana's mother shared with us that she feels he likes school and is bored at home on vacations when he cannot see his friends. When asked directly about feelings about school, Dana would say "It's okay," in keeping with his cool approach to everything and the necessity to be part of a peer group in which being too enthusiastic about school would likely make one too unique.

Social Context for Writing: Year I

During the first times that Dana was observed in this study, the writing center was new, it was relatively early in the school year, and the presence of researchers in the classroom was a novel intrusion. The assignment on 10/29/81 was a thank-you note to another class who had done a Halloween presentation for Ms. Howard's third grade. (Capitalized texts in the following sections show writing in progress)

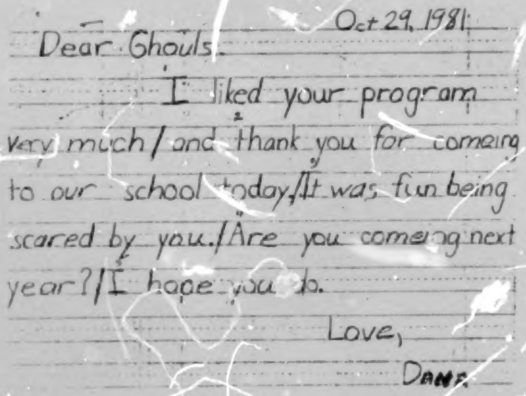
Dana's letter began conventionally. DEAR GHOULS... The little group of 5 or 6 students at the writing center conversed as they wrote. Dana continues I LIKED YOUR... Dana pauses because a classmate at the center asked him how to spell a word. I LIKED YOUR PRO...GRAM. Dana carefully pronounced GRAM as he wrote PROGRAM. Then another classmate asked Dana how to spell a word. Then Dana turned to the researcher and asked, "How do you spell VERY?" Before the researcher could make any response, a classmate called out V-E-R-Y. I LIKE YOUR PROGRAM VERY MUCH AND THANK....

At this point in Dana's text, Evelyn, a classmate at the writing center who had not done much writing so far, grabbed Dana's paper and read it. Dana grabbed his paper back from Evelyn and resumed writing. I LIKED YOUR PROGRAM VERY MUCH AND THANK YOU FOR COMING TO OUR SCHOOL. At this point, Dana followed the example and grabbed a paper belonging to Phyllis, another classmate. The teacher intervened in an attempt to return them all to task I LIKE YOUR PROGRAM VERY MUCH AND THANK YOU FOR COMING TO OUR SCHOOL TODAY. IT WAS FUN BEING SCARED BY YOU.

Dana stopped here to help Phyllis spell a word; she meanwhile was kicking Dana under the table. He continued...ARE YOU COMING NEXT YEAR? I HOPE YOU DO. There was talking and socializing at the writing center at this point. Dana then wrote LOVE, DANA.

At this point Dana said to the researcher: "I'm finished. How many words did I write?" The researcher showed Dana the manual observation form where the words in his story had been numbered. Dana then took his paper to Ms. Howard for editing. She helped him with periods. When he returned, the researcher asked him what changes were made in the writing. Dana responded that there were none. There had in fact been a period added by his teacher, but Dana would not show the change to the researcher until later when he chose to come over and show her the correction.

Figure IX-1 Dana's Text 10/29/81



Oct 29, 1981

Dear Ghouls

I liked your program
very much / and thank you for comeing
to our school today/ It was fun being
scared by you./ Are you comeing next
year?/ I hope you do.

Love,

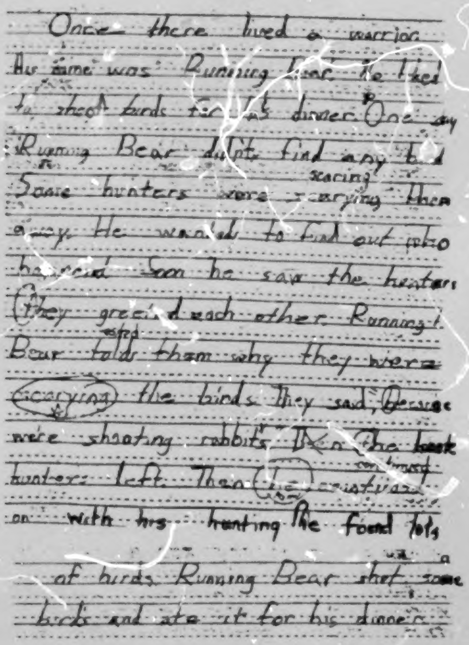
Dana

Oct. 29 , 1981 Dear Ghouls ,
I liked your program very much
and thank you for coming to our school today
It was fun being scared by you .
Are you coming next year ?
I hope you do .
Love ,
DANA

Although it might appear that there was a great deal of off task behavior at the writing center that day, most classmates completed the assigned thank-you letter. The interruptions and interactions which at some points might appear to inhibit the writing were also used productively to assist in the task of writing. This assignment became collaborative as different classmates interacted and used each other as resources in making decisions about spelling and other writing issues. In this episode, the nature of what Dana has written reflects the dynamic nature of the social community in the classroom as part of the evolving text.

As the year progressed, the researchers discovered that students were both creative and resourceful in solving their own problems related to writing. One problem students typically faced was how to write down words that they may never have written before. This spelling issue was solved in a variety of ways. The subjects used many resources besides the dictionary and asking someone how to spell a word. During an episode on 2/23/82, Dana demonstrated such resourcefulness. He was at the writing center, writing an Indian style legend from some Native American sketched pictures that were displayed on the bulletin board. His story was about a warrior and hunter named Running Bear. The researcher noticed that the word WARRIOR was spelled conventionally. Thinking that this was a sophisticated word for a third grader to spell, the researcher asked Dana how he knew how to spell the word WARRIOR. Dana answered that he saw the word on the side of the school bus from the high school, whose school sports teams are called The Warriors.

Figure IX-2 Dana's Text 2/23/82



Once there lived a warrior
His name was Running Bear He liked
to shoot birds for his dinner One day
Running Bear didn't find any bird
scaring
Some hunters were scarying them
away He wanted to find out who
happend Soon he saw the hunters
They greeted each other Running
told
Bear tolds them why they were
scarying the birds They said, Because
we're shooting rabbits Then the hunt
continued
hunters left Then he continued
on with his hunting He found lots
of birds Running Bear shot some
birds and ate it for his dinner.

Once there lived a warrior .
His name was Running Bear .
He liked to shoot birds for his dinner .
One day Running Bear didn't find any birds .
Some hunters were scaring them away .
He wanted to find out what happened .
Soon he saw the hunters .
They greeted each other .
Running Bear told them why they were scaring the birds .
They said , "
Because we're shooting rabbits . "
Then the hunters left .
Then he continued on with his hunting .
He found lots of birds .
Running Bear shot some birds and ate it for his dinner .

On 3/4/82 the group at the writing center had been encouraged to write about anything they wanted to, which provides another perspective on the interaction of peers during writing.

Dana chose a sports story, as usual. The community of writers at the center (which included the researcher) were very aware of each other. For example, Dana stopped his writing at one point to inform the researcher that he had not actually erased anything although he had used his eraser. This unsolicited information let the researcher know that Dana was conscious he was being observed. At times he stopped to observe the researcher writing frantically to catch up to him. Another time in this same episode, he stopped to watch two classmates, James and Walter, doing their writing. He appeared to listen attentively and then returned to his own work. He later stopped to watch another researcher, who was observing Vincent. Vincent had asked to see what Dana was writing. Conversation and comments in this setting do not always require responses; Dana chose to make no reply but listened in on a subsequent conversation that Vincent and his researcher were having about the use of hyphens. Dana looked back at his own paper and began to add a hyphen to a football score, but changed his mind. Dana's story up to this point was written totally in capital letters. He stopped again to watch what James and Walter were doing. Dana's researcher asked him why his story was all in capitals. He replied "I just like to write like that." Walter then asked Dana the spelling of a word. Dana wrote his last sentence and declared "I'm finished." The researcher asked Dana to read his story on audio tape. Nearby Vincent took a break from his writing, crawled onto a desk and listened to Dana read his story, then also listened to Carl who read his story aloud to an available listener.

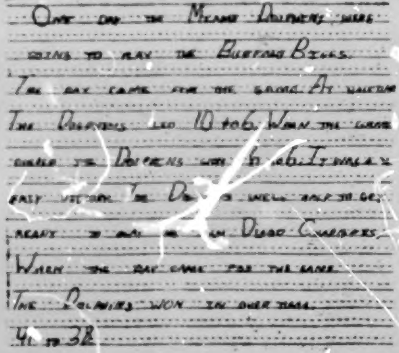
It is interesting that by this time, most of the class was already lined up for lunch and out the door but the writing center did not break up immediately.

There were only a few occasions in Year I when Ms. Howard did not assign writing topics. On this occasion, the third graders at the writing center were intensely interested in hearing what other classmates had written. The writing center broke up about ten minutes later to catch up to the lunch line. Vincent and Dana's stories had been read and listened to by each other, the two researchers, and James, Walter, and Carl, all of them constituting part of Dana's evolving text.

Teachers cannot always guess the extent to which learning takes place through peer interaction in a classroom setting. Often an idle listener might be thought of as a procrastinator who is not completing assigned work. There are no walls between students in classrooms. Information and ideas pass freely as students share their stories, listen in on classmate conversations, talk about assignments or eavesdrop on the teacher's interactions with classmates. In this episode, various classmates no doubt learned by listening. Dana, who listened in on Vincent's discussion on hyphens, had never before produced a hyphen that the researchers observed. For some reason he started to use a hyphen during this writing event, but then chose to discard his attempt on this particular occasion. Hyphens show up in Dana's writing more than a year later, used to express calendar dates numerically. (i.e.; 4-6-83) Neither teachers nor researchers can be certain at what point Dana believed he understood enough about hyphens to integrate them in his writing. However, the researcher did note that the first time hyphens do appear in Dana's writing is on 4/6/83 when, incidentally, the researcher also wrote the date with hyphens on the manual observation form. It is highly probable that Dana, who was accustomed to watching the researchers intensely, learned an appropriate use of hyphens by watching the researcher, but it may also be the culmination of a number of experiences he had during the year from the time he overheard Vincent's inteaction about hyphens until the time he decided he was capable of using them.

In a later interview, Dana identified his March 4th sports story as his best writing for that time of year. When asked why, he responded "Cause I like football." But when asked to rank order the stories according to how Ms. Howard would do it, he rated it as the third best out of four. "I don't think she likes football that much," was his justification. The researcher again asked Dana why he had written the piece all in capital letters. "I just wanted to do that. I like to write in capital letters."

Figure IX-3 Dana's Text 3/4/82



ONE DAY THE MIAMI DOLPHINS WERE GOING TO PLAY THE BUFFALO BILLS
.
THE DAY CAME FOR THE GAME .
AT HALFTIME THE DOLPHINS LED 10 to 6 .
WHEN THE GAME WAS OVER THE DOLPHINS WON 16 TO 6 .
IT WAS AN EASY VICTORY .
THE DOLPHINS WILL HAVE TO GET READY TO PLAY THE SAN DIEGO CHARGERS
.
WHEN THE DAY CAME FOR THE GAME ,
THE DOLPHINS WON IN OVERTIME , 41 to 38 .

Young writers seem to be aware of the human and non-human resources at their disposal. Because Dana was a good speller even in the third grade, there are many instances throughout the data that Dana was used as a resource for spelling. There are considerably fewer occasions where Dana asked someone how to spell something. It was no secret that Dana was a good speller. In one concepts of writing interview, Dana was asked:

Researcher: "Who's a good speller that you know?"
Dana: "Me."

Other classmates confirmed that Dana was a good speller on similar interview questions.

At the end of Year 1, Dana was asked in an interview if he thought his stories had gotten better or worse or had stayed the same.

D: Gotten better.
R: How do you think they might have gotten better?
D: They've got more excitement in them.

Social Context for Writing: Year II

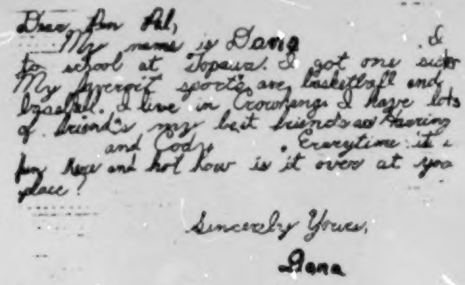
In the early observations for Year II, there are many interesting episodes in terms of social context. As the year progressed, however, it became necessary to sometimes remove subjects from this classroom in order to collect writing data, due to some disturbances that resulted in class punishments. Therefore, the rest of the class was not always writing when the researchers were present.

On October 13th, the researchers videotaped Dana writing his first letter to a pen pal. Each class member had a pen pal in another 4th grade class at a school in another part of Arizona. When the researcher joined the writing episode, already in progress, Dana had the following already written: DEAR PEN PAL, MY NAME IS DANA V. I GO TO...The first thing the researcher observed was Dana's mouth movement sounding out, "To-pa-wa. Topawa," as he wrote: SCHOOL, AT TOPAWA. Dana appeared to be thinking. After he added the period and said "um-um-um," followed by a few seconds of silence. He then wrote: I GOT ONE SISTER.

At this point he made noises with his mouth, and he chewed on his finger. He then wrote: MY FAV.... Dana got up from his seat at a table, went back to his desk to get his dictionary, where he was briefly asked a question by a classmate. He then returned to the table, opened the dictionary, and turned to the letter F section. Apparently unsure of how to spell FAVORITE, he ran his finger down each column of each page throughout the letter F section. Meanwhile, a classmate came over and read Dana's paper aloud over his shoulder. Dana gave up on his attempt at finding FAVORITE in the dictionary and finally completed the sentence: MY FAVEROIT SPORTS ARE BASKETBALL AND BASEBALL.

"What else?" Dana asked aloud but to no audience in particular. The class meanwhile was preparing to go to lunch and Dana became anxious to get done. I LIVE IN CROWHANG. Here Dana stopped and played with the nearby dictionary, but did not use it. I HAVE LOTS OF FREN.... Dana looked in the dictionary this time to check the spelling of FRIENDS, found it, erased EN and wrote: FRIEND'S MY BEST FRIENDS ARE HARRINGTON N. AND CODY J. Dana stopped to fix a letter in Cody's last name. He completed his letter with EVERYTIME IT IS FUN HERE AND HOT HOW IS IT OVER AT YOUR PLACE? Dana stopped to look around for several seconds and added SINCERELY YOURS, DANA. "There!" Dana makes his final comment half to himself and half to the researcher to signify his completion.

Figure IX-4 Dana's Text 10/13/82



Dear Pen Pal,
My name is Dana . I
go to school at Topawa. I got one sister
My favorit sports are basketball and
baseball. I live in Crowhang. I have lots
of friend's my best friends are Harring
and Cody . Everytime it's
fun here and hot how is it over at you
place?

Sincerely Yours,
Dana

Dear Pen Pal ,
My name is D[redacted] .
I go to school at Topawa .
I got one sister .
My favorite sports are basketball and baseball .
I live in Crowhang .
I have lots of friends .
My best friends are Harrington and Cody .
Every time it is fun here and hot .
How is it over at your place ?
Sincerely yours , D[redacted]

As Dana executed this assignment, he seemed to be making decisions that all writers must make. Unlike many writing assignments, this one has a clearly defined audience. Some fourth grader named Harold will be reading his letter. Subvocalization is observable throughout this piece as the writer seems to take great care both with his choice of what to say and the spelling of words. He makes five revisions connected with spelling during this episode, stops to think or gaze around the room often, uses resources twice and re-reads a section of text once. This piece of writing seemed to require hard work. Within the 60 word text, there are nearly 30 coded behaviors - a behavior for every two words written. Since pen pal letters were not among the writing data for Year I, Dana may be working this hard because of a new writing form which may involve solving new problems and making new decisions.

The community of writers serves various functions. For example, sometimes the writers discuss the content of their writing and their ideas about writing.

On November 17th, Dana and his classmates were assigned to write about the recent Papago rodeo, a popular cultural event on the reservation. Dana also proudly informed the researcher that it was his birthday. His story began with the title THE RODEO STORY. It started ONE DAY I WENT TO THE RODEO. WHEN I GOT TO THE RODEO I MAN GETTING BUCKED OFF A WILD HORSE. At this point the researcher interrupted Dana to ask whether or not there was a period inserted there, after the word HORSE. Dana nodded and continued: THE CLOWN HELPED THE MAN GET AWAY BEFORE THE HORSE KICKED HIM. Dana paused to listen to the teacher telling a joke to class members. He then resumed writing. THEN CAME STEER WRESTLING. A MAN NAMED HARRINGTON N. WAS FIRST. HE RACED ON HIS HORSE AFTER THE CALF.

At this point, a classmate interrupted Dana to ask what rides he had been on at the carnival part of the rodeo. They talked briefly about this. HARRINGTON ROPED THE.... Dana ceased writing here and left to go to the bathroom, returning promptly. Almost as if there was no break in his train of thought, he continued, CALF AND THE CALF FELL

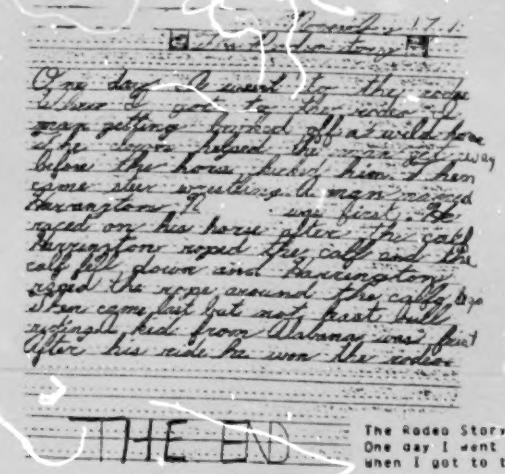
DOWN AND HARRINGTON ROPED THE ROPE AROUND THE CALFS LEGS. Here, Dana stopped to watch the researcher and looked over at the manual observation form. He noticed his name written on a line in the upper right hand corner labeled SUBJECT, and said "I'm not a subject!" The researcher explained that the word SUBJECT can sometimes mean a person's name. "Oh," Dana said, "I thought I was a subject like spelling." THEN CAME LAST BUT NOT LEAST BULL RIDING.

Dana resumed his writing which was accompanied by machine-gun type noises from his mouth, apparently in response to a nearby conversation. The conversation caused Dana to cease working for two minutes or more as he listened. Due to the prolonged period of non-writing, the researcher asked Dwayne how his story was coming along.

"I'm still thinking," he said. The researcher responded "That helps sometimes." Another classmate named Chris piped in, "I don't think. I just write. How about you, Dana?" "Yeah - I write, but then I start to think." was Dana's reply as he continued to write. A KID FROM ALABAMA WAS FIRST.

The researcher interrupted Dana to ask him what the last word he wrote was. He said, "first." He talked to Chris again about the recent rodeo for a minute or so, and then wrote AFTER HIS RIDE HE WON THE RODEO. Dana took out a ruler and began to use it to draw a design of lines on the bottom of the paper, which turned out to say THE END.

Figure IX-5 Dana's Text 11/17/82



The Rodeo Story
One day I went to the rodeo .
when I got to the rodeo , a man was getting bucked off a wild horse
.
The clown helped the man get away before the horse kicked him .

Then came steer wrestling .
A man named Harrington H was first .
He raced on his horse after the calf .
Harrington roped the calf
and the calf fell down
and Harrington roped the rope around the calf's legs .
Then came last but not least bull riding .
A kid from Alabama was first .
After his ride he won the rodeo .
THE END

Throughout this episode, the people in Dana's environment are somehow involved in his writing. He is aware that classmates are also writing about the rodeo and so they compare notes and discuss the event at intervals throughout the episode. Dana and Chris enter into a brief metacognitive conversation about thinking and writing. Dana later shared with a researcher that he used to not have to think abut his writing, but that he had changed and now he needed to think about his writing more.

Without really realizing it, Dana has reflected on his development as a writer. He's in a different place developmentally than Chris, who claims he can execute his assignments without any interruptions or pauses to solve problems that writers face or without making the decisions that writing requires. What Chris described was observed more often by the researchers in Year I but changed for writers as they developed. The plow-through, anything-goes style that Dana's classmate described seems to be more characteristic of inexperienced writers.

In subsequent writing episodes for the remainder [illegible] Year II, it became more typical of Dana to interact very little, especially with classmates, as he wrote. His writing is characterized by a high degree of subvocalization, re-reading and revision. It is also typical for Dana to continue writing by choosing not to respond to class announcements or other interruptions and attempted interactions. It is difficult to say [illegible] Dana's behavior was a matter of style or if it is in response to the classroom climate where discipline became a priority and students were rewarded for the kind of non-interactive quiet stance that Dana adopted.

A classroom that is organized to discourage conversation and interaction must weigh what is lost as well as what is gained. The gain of a quiet classroom may forfeit certain powerful learning opportunities. Vygotsky (1981) describes what he calls the "Zone of Proximal Development" in learning. This notion, which says that children are more capable in collaboration with peers or adults than they are working alone at any point in time, applies in every classroom where teachers and children work together and interact in the day-to-day business of living in a literacy community. Where children are taught to build walls around themselves and "get their own work done," many learning opportunities are lost.

Instructional Context for Writing

A great deal can be learned about the instructional context for writing in a classroom through the comments and insights of the children themselves. Dana provides such information in many of his interviews. Dana knows that all writing assignments are not created equal. During a Year I Bi-Monthly Interview, he reflected on writing personal narrative assignments as opposed to making up stories.

R: When you write sports stories, do you like to write about things that really happened or do you like to make them up?
D: Make them up.
R: What do you think is easier to do, writing that you make up yourself or writing when you're writing about something that really

happened?
D: About something that happened.
R: Why is it easier?
D: Because I know what happened.
R: Because you know what happened?
D: Yeah, and I can write in words.

Dana has decided in this segment that personal narrative is an easier task than creating a story from scratch. In the following excerpt, Dana had already rank-ordered a group of his texts. At the point where the interview begins, he has just rank-ordered the same group of work according to how he believes his teacher, Ms. Pagett, might do it. The set of writing for this interview included four very different kinds of writing: An Indian style legend, an unassigned story, a retelling of a movie, and a story from a scribble picture that the students were asked to interpret and color and then use to generate a story.

R: Okay, again we've got the February 9th story on William Tell on top. Tell me why she <Ms. Pagett> would have put that one on top?
D: Cause she really wants it.
R: She really wants it. What do you mean?
D: She wants it handed in.
R: She wanted it handed in?
D: Uh-huh (yes).
R: Didn't she want the other ones handed in?
D: Uh-huh.
R: Well, what do you mean then? Did she want this handed in more than others?
D: Uh-huh.
R: What do you mean by that?
D: I think so.
R: Are you saying it's more important for...to get it done or...?
D: Yeah.
R: Well why do you think so?
D: She wants it done. She really wants it.
R: She really wants it?
D: Uh-huh.
R: Do you think she's going to use it for anything or why do you think she really wants it?
D: I don't know.
R: No idea? What would she say about your writing today?
D: I don't know.
R: Oh, I bet you could make some guesses. What kind of things does she usually say about your writing?
D: I don't know, she never tells me.

As the interview continues, the researcher has asked Dana to pretend he is teacher and decide which of the four different kinds of assignments he would choose to assign to the class. He first indicates a preference for his unassigned basketball story as the preferred one.

R: Would it be about basketball or would you tell them to pick it (the

assignment) out themselves.
D: Pick it out themselves.
R: Okay. Why do you think that would be a good idea?
D: To see how well they write.
R: To see how well they write? Do you mean that you could see how well they write on this more than something else maybe?
D: Uh-huh. (yes)
R: What do you mean?
D: I don't know.
R: How can you tell how someone writes when they're writing about just anything?
D: See how long they write.
R: What do you mean...?
D: How good.
R: How good they write? This doesn't show you how good they write? (pointing to movie retelling)
D: Uh-uh. (no)
R: Why?
D: 'Cause you could just copy by the movie.
R: 'Cause you could just copy by the movie. All right, what about the one with the <scribble> picture, does that show how good they write?
D: Uh-huh.
R: Why?
D: How much imagination they have.
R: Oh, okay. And what about the kind on the legend? Just make believe.
R: It's just make believe? Is it...is make believe easier?
D: Um-huh...(Yes)
R: Or harder than...
D: Easy
R: Easy? Okay, what makes it easy?
D: You don't have to write that much.

Dana has given us interesting information about assignments. He first of all expresses that the teacher's assigned writing would be the one she would prefer. In other words, he is responding to how much he believed the teacher seemed to value the assignment. Dana uses these cues in the absence of other ones to determine the teacher's preference. When asked in this interview what his teacher would think of his writing, he simply replies that he does not know because "she never tells me."

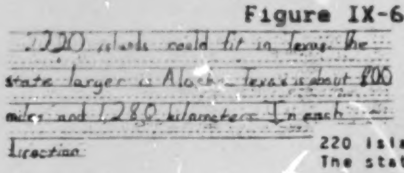
Dana's next insight is particularly interesting. In spite of the fact that his longest story is a retelling of a movie the class viewed on the story of William Tell, he suggests that this type of writing does not show how well a person writes, because they don't have to think about what to write; that the scribble-picture assignment shows a writer's imagination, which the movie retelling does not; and that the scribble picture assignment and the Indian legend were easy because they could be short.

Teachers who are interested in knowing what values and ideas they are communicating to their students can find candid observations in the words of their own students. Another way students inform us about aspects of the instructional context of writing is revealed in their behavior during a writing assignment and the finished product itself.

In Year I, the researchers had an occasion to observe two unusual assignments. On 1/14/82, and on 1/28/82, the class was assigned the task of writing about the Arizona State Seal, State Bird, State Flower and State Flag. They were then expected to apply new research skills and write about a state of their choice. The encyclopedia was the principal source of information to be used. On 1/14/82, Dana didn't understand what he was to do. He encouraged Albert, who was sitting nearby, to go up to the teacher and ask for further instructions. Dana sat idle, awaiting Albert's return. Albert returned and pointed out to Dana where the assignment was listed on the bulletin board, along with pictures to help. Looking through his folder, Dana noticed that he had partly completed the assignment on the Arizona State Bird. Therefore, he elected to begin the Arizona state flag piece. His subsequent writing lasted approximately five minutes of the 25 minute period, and consisted a 35 word piece which then went back into the writing folder, apparently completed.

On 1/28/82, Miss Howard again assigned non-fiction research topics. Dana's choice this day was to write on Texas. The writing center began at 10:25. Until 10:49, Dana was still looking through various volumes of encyclopedias with very little actual reading of them. At 10:49, Dana began to write. By 10:52, he was done, having paused only for 2 revisions and three spelling checks.

Figure IX-6 Dana's Text 1/28/82


220 islands could fit in Texas. The
state larger is Alaska. Texas is about 800
miles and 1,280 kilometers In each
Direction

220 islands could fit in Texas .
The state larger is Alaska .
Texas is about 800 miles and 1,280 kilometers .

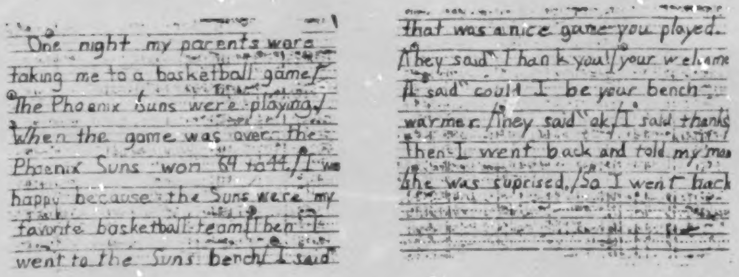
Since it was then time to clean up for lunch, Dana did not hesitate to retire his piece permanently to his writing folder.

What seems clear here is that neither Dana nor his classmate Albert had a particularly good conception of what to do. The nature of the assignment was new and placed new constraints on the writers. They were working with an unfamiliar topic, and in an unfamiliar way. They were not yet accustomed to reading encyclopedias. They did not have experience in paraphrasing what they should have learned. And they had no experience with this kind of research or with report writing. Consequently, they had a hard time getting started and a difficult time knowing what to write. They did the assignment to get it over with. Within the 25 minute writing center time period, three minutes of actual writing took place, and then only as the morning was about to draw to a close.

It is interesting to compare the outcomes when Dana does his favorite kind of writing (unassigned) as opposed to writing when Dana was uncertain about what was expected of him. In January 1982, the researchers were able to observe both ends of the spectrum in Dana's preferences.

On January 7th, 1982, Dana had the opportunity to choose his assignment and he wrote on his favorite topic - sports.

Figure IX-7 Dana's Text 1/7/82


One night my parents were
taking me to a basketball game/
The Phoenix Suns were playing/
When the game was over the
Phoenix Suns won 64 to 44/I wa
happy because the Suns were my
favorite basketball team/Then I
went to the Suns bench/ I said"

that was a nice game you played.
They said "Thank you!/your welcome
I said "could I be your bench
warmer/They said "ok/I said thanks
Then I went back and told my mo
She was suprised./So I went back

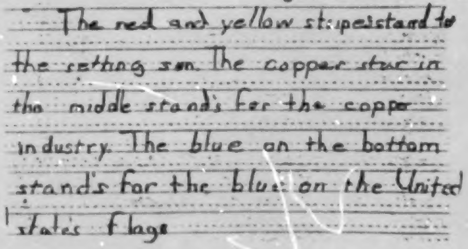
One night my parents were taking me to a basketball game .
The Phoenix Suns were playing .
When the game was over the Phoenix Suns won 64 to 44 .
I was happy because the Suns were my favorite basketball team .

Then I went to the Suns' bench .
I said , " That was a nice game you played . "
They said , " Thank you ! " "
You're welcome . "
I said , " Could I be your bench warmer ? "
They said , " O.K. . "
I said , " Thanks ! "
Then I went back and told my mom .
She was surprised .
So I went back .

Dana's resulting 90 word text has 88 conventional spellings. It consists of 14 T-units, (six of which are dialogue) 18 main clauses, 2 adverbial clauses, one nominal and 2 conjoined clauses. He uses three idioms, 18 noun phrases, 5 modified noun phrases, 13 verb phrases, 6 complex verb phrases, 2 prepositional phrases and one adverbial phrase. The story averages 1.64 clauses per T-unit, 3.92 phrases per T-unit, and 7.42 words per T-unit.

On January 14, 1982 Dana was required to complete the research assignment that was mentioned earlier on the Arizona State flag.

Figure IX-8 Dana's Text 1/14/82



The red and yellow stipesstand to
the setting son The copper star in
the middle stand's for the coppr
industry. The blue on the bottom
stand's for the blue on the United
state's flags

The red and yellow stripes stand for the setting sun .
The copper star in the middle stands for the copper industry .

The blue on the bottom stands for the blue on the United state's
flag .

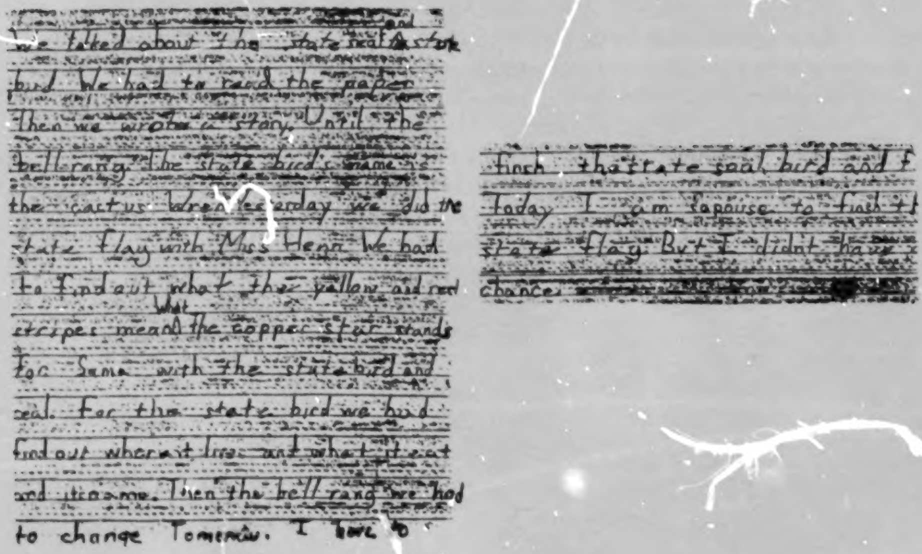
Dana's 35 word text has 33 conventional spellings. The structure consists of three T-units which are also all main clauses. There are 2 noun phrases, 4 modified noun phrases, 3 verb phrases and 3 prepositional phrases. In addition, there is a cohesion problem in his text when he begins his first sentence without informing his audience what he's writing about.

It is also interesting that on January 12, 1982, the first time when the research projects were assigned, Dana found a creative solution to his problem of not understanding what the teacher asked. Dana merely wrote and described what the assignment was meant to be.

Dana's resourcefulness helped him survive the writing center that day, but his result was clearly not what the teacher wanted. Dana's version of his teacher's assignment was 119 words long with 114 conventionally spelled words. In 12 T-units there are 12 main clauses along with one adverbial and 5 nominal clauses. There are 1.5 clauses per T-unit, 5 phrases per T-unit, 3.33 phrases per T-unit and 10 words per T-unit. In addition, this piece has 2 cohesion problems where audience knowledge is presumed and 2 syntax problems when sentences are actually fragments. Nonetheless, compared to the piece of 1/14/82 when he complied with the assignment, his resourceful solution is relatively more complex and thorough.

As a result of experiences like this, one cannot help but speculate that assignments strongly determine writing outcomes.

Figure IX-9 Dana's Text 1/12/82



and
We talked about the state seal state
bird We had to read the paper
Then we wrote a story. Until the
bell rang. The state bird's name is
the cactus Wren Yesterday we did the
state flag with Miss Henn We had
to find out what ther yellow and red
what
stripes meand the copper star stands
for Same with the state bird and
seal. For the state bird we had
find out wher it lives and what it eat
and its name. Then the bell rang we had
to change Tomorrow. I have to
finsh the state seal, bird and f
Today I am sopouse to finsh th
state flag But I didnt have a
chance.

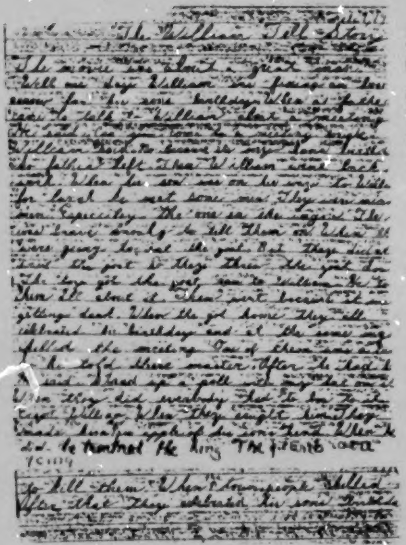
We talked about the state seal and state bird .
We had to read the paper .
Then we wrote a story , until the bell rang .
The state bird's name is the Cactus Wren .
Yesterday we did the state flag with Miss Henn .
We had to find out what the yellow and red stripes mean ; what the copper star stands for ; same with the state bird and seal .

For the state bird we had to find out where it lives and what it eats and its name .
Then the bell rang .
We had to change .
Tomorrow I have to finish the state seal , bird and flag .
Today I am supposed to finish the state flag .
But I didn't have a chance .

In Year II, Dana experiences different types of assignments. Ms. Pagett asks the fourth grade to describe picture posters, retell cartoon movies viewed in class, write to pen pals, interpret scribbles to generate a story, and respond to specific assignment ideas. (i.e. write a menu for your enemy.) There is a small amount of personal narrative, and one unit involving Southwestern style stories or legends in preparation for a local writing contest.

[illegible] till holds to his conviction that personal narrative is the easi[illegible] But he also reflected that some other assignments were imaginative. Dana's most prolific piece of writing comes from the retelling of a cartoon movie version of WILLIAM TELL shown in class. Although Dana's comments suggest that he doesn't feel this type of writing shows what a writer can really do, since you can "just follow the movie," he writes extensively after the movie viewing.

Figure IX-10 Dana's Text 2/9/83



The William Tell Story
The movie was about a great man .
The movie was about a great man .
Well , one day William was fixing a bow and arrow for his son's birthday
, when a father came to talk to William about a meeting .
He said , " Can you come to a meeting tonight ? "
William said , " No , becaust it's my son's birthday . "
So the father left .
Then William went back to work .
When his son was on his way to William's for lunch he met some men
.
They were mean men , especially the one in the wagon .
The boy was brave enough to tell them off .
Then they were going to eat the goat .
But they didn't want the goat
so they threw the goat down .
The boy got the goat and ran to William .
He told him all about it .
They went because it was getting dark .
When they got home they all celebrated his birthday and on the same
night held the meeting .
One of them was a traitor .
So he told their master .
After he had heard , he said , " Stand up a pole with my hat on it
. "
When they did everybody had to bow to it , except William didn't .
When they caught him , they made him shoot an apple off his son's
head .
When he did , he threatened the king .
The guards were going to kill them , when the townspeople killed
them .
After that they celebrated his son's birthday .

Dana's William Tell story is 234 words long with 218 conventional spellings. It consists of 24 T-units, 43 clauses and 144 phrases, with an average of 1.79 clauses per T-unit, 6 phrases per T-unit, and 9.95 words per T-unit. Although Dana does not rate his piece as his best work, he recognizes that his teacher would value it highly.

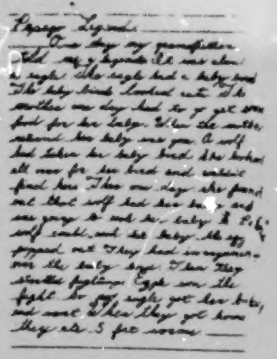
With the introduction of pen pal letters in Year II, Dana suddenly had a real audience to write for. He carefully checked spellings and letter formations as he wrote. He had to describe what information about himself he would choose to include.(See Figure IX-4).

After Dana had asked his pen pal the names of his dogs, the researcher asked Dana where his pen pal was from. Realizing he did not know the answer, Dana asked the pen pal where he lived and told his pen pal where he lived.

At this point, the researcher asked Dana how his Pen Pal would know where Crowheng was and that perhaps it might be a good idea to give his reader some more information. With this in mind Dana finished his letter.

During the winter of Year II when Ms. Pagett's class was writing in preparation for an area writing contest, the class assignment was to write Southwestern type stories. The class knew about their assignment a week in advance so they could explore topics or legends with family and/or friends. Dana wrote an Indian style legend.

Figure IX-11 Dana's Text 1/26/[illegible]3



Papago Legends
One day my grandfather told me a legend .
It was about an eagle .
The eagle had a baby bird .
The baby bird looked cute .
The mother one day had to go get some food for her baby .
When the mother returned her baby was gone .
A wolf had taken her baby bird .
She looked all over for her bird and couldn't find her .
Then one day she found out that wolf had her baby and was going
to cook her baby .
Before wolf could cook her baby the eagle popped out .
They had an argument over the baby bird .
Then they started fighting .
Eagle won the fight .
So Eagle got her baby and went .
When they got home they ate 5 fat worms .

As Dana's story begins, he announces that he had heard a legend from his grandfather that was about an eagle. At the beginning of the fifth sentence Dana introduces WOLF. Two sentences later, Dana drops the use of the determiner on the word WOLF.

In the very next sentence, WOLF has been given no determiner but EAGLE has retained one. By the last part of Dana's legend the word EAGLE no longer has a determiner.

The reference to animal names used as a proper name instead of as a generic referent is a feature that appears in Indian legends, including ones from the Papago and Pima heritage. The following is a segment from a Pima - Papago creation story.

> "When the land began to appear, Earthmaker and Coyote got out of the water. Buzzard was flying high in the sky." (Dutton and Olin, 1979)

It is interesting that Dana's legend shifted register as he wrote and came to more closely resemble the register of animal legends with the animal names becoming proper rather than common nouns. Dana's legend is 125 words long with 122 conventional spellings. The fifteen T-units include 13 main clauses, 1 nominal clause, 3 adverbial clauses and 5 conjoinings. It averages 1.46 clauses per T-unit, 4.73 phrases per T-unit, and 8.26 words per T-unit.

Summary of Features

From early on in Year I, Dana effectively controls b[illegible] manuscript and cursive writing and can operate exclusively in [illegible]ther. When

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assignments were done on wide lined, primary paper, Dana's handwriting was larger, taking up more space on the paper. On assignments where the lines were smaller, his handwriting conformed to fit the space to be used and became smaller and more mature looking. He controls directionality and text spacing throughout Year I. There are no incidents of letter or word reversals. His papers are generally neat in appearance with all erasures having been carefully made. Dana made no attempts to divide or hyphenate words at the end of sentences.

In Year II, Dana wrote entirely in cursive except when he was writing a menu. The size of his handwriting continues to fit the size of the paper. Dana played with text spacing by occasionally writing only on every other line. He uses no hyphens to divide words at ends of lines nor does he even attempt to divide words when he comes to the end of a line. He squeezes them in where necessary or begins on a new line.

In Year I, 94.87% of all Dana's 1,146 words are spelled conventionally. His punctuation is also highly conventionalized, being used appropriately about 75% of the time. Most of his misuses of capitalization occur at the beginnings of sentences and at the beginning of words that need capitalization. During the second half of Year I, letter formation problems completely disappear. Capitalization problems increase in the second half of the year as forms of writing become more varied and more new things are attempted.

In Year II, 95.38% of Dana's 1,632 words written are spelled conventionally. Letter formation problems are rare (5 times all year). Again, problems with capitalization, as well as problems with punctuation, increase during the second half of the year. Over 83% of all Dana's punctuation is used conventionally throughout Year II.

During Year I, Dana wrote over 1100 words using 398 different words. He controlled the spelling of all high frequency words except for words with apostrophes (your, you're). No words are unconventionally spelled more than 4 times during the year. The kinds of words that Dana does not spell conventionally are generally words with apostrophes or unusual words like COUNTINUED (CONTINUED), SCARYING (SCARING), FAVROITE (FAVORITE) and VILLIANS (VILLAINS).

During Year II, Dana wrote 1,654 words using 506 different words. His invented spellings are on less common words like TOURNEMENT (TOURNAMENT), TREATRED (THREATENED), TRATOR (TRAITOR) and POISEN (POISON).

Overall in both years, Dana writes an average of 1.38 clauses per T-unit, 4.3 phrases per T-unit, 7.71 words per T-unit and 5.57 words per clause. He produces 36.57 behaviors per 100 words and only 2.6 problems per 100 words.

Dana was probably the most advanced writer of all our subjects from the onset of the study. The development in Dana's writing over two years does not have the same dramatic changes that it might for

those
subjects who were initially more hesitant to write and ended up making huge leaps and bounds in the two years. Dana's changes are more subtle. He already controlled mechanics and wrote elaborate sentences with many embeddings when the study began.

Table IX-1 Statistical Summary of Dana's Syntax: Years I and II

	Yr. I/1st	Yr. I/2nd	Yr.II/1st	Yr. II/2nd
Number of stories	9	9	8	9
T-unit count	80	85	89	124
clause count	121	104	121	178
phrase count	373	322	655	568
word count	626	564	655	1005
clauses/T-unit	1.51	1.22	1.35	1.43
phrases/T-unit	4.66	3.78	4.13	4.58
words/T-unit	7.82	6.63	7.35	8.10
clauses/100 words	19.32	18.43	18.47	17.71
T-units/100 words	12.77	15.07	13.58	12.33
Problems/100 words	3.35	2.12	2.29	2.78

Although at first glance, Dana's syntax seems to be becoming more complex, when the statistics are examined in relation to the amount of writing (i.e. clauses/100 words) there are no great changes in his overall use of structure. More developmental and longitudinal data on many more writers are necessary to explain the changes in writers. Dana changes as a writer through his own experimentation with conventions, spelling and different ways of expressing himself. We do not know if he received different kinds of instruction what impact that might have on his development. By Dana's own admission, many of his writing assignments do not show how well he can write. And where possible Dana will select the shortest, easiest way to complete an assignment that he was not particularly excited about from the beginning.

The narrative rating scale for his development of plot and events, characterization, setting and overall quality does not show any consistent pattern. The measures for these different features of narration fluctuate from piece to piece throughout the two years of the study, which is similar to the other subjects in this study. At no time during either Year I or Year II did Dana get the lowest rating (1) on any aspect of any piece of writing. His pieces of writing tended to be rated high, mostly 3 and 4, in all four areas of evaluation.

Dana will most likely continue to be successful both as a writer and as a student. He enjoys the school milieu and the tasks associated with it. He is self-confident and flexible and can maintain a strong sense of self. It would be interesting to follow Dana into high school and post secondary life to see if his talent for flexibility and his competence as a student continue to be ingredients for a successful and productive life.

CHAPTER X - VINCENT

by Wendy Kasten

Background and Personal Data

The first way that the researchers came to know Vincent was through his intense interest and continuous questions about what we were doing and how we were doing it in his classroom. In the early days of the study as we were observing Vincent's writing and coding onto the manual observation form (See Chapter III), Vincent had to know what we were writing down, what the different symbols meant, and why it was all being done.

Vincent has a quiet curiosity about the world and a serious, reflective approach to life. In his world, adult approval is not particularly important. He prefers the pursuit of his own agenda that assists him in some understanding of things. Since Vincent does not view the greater portion of schoolwork as important, he does work at one period of time during periods when there are other expectations. He finds little reinforcement or satisfaction in getting assignments in on time, or getting them handed in at all. This does not make Vincent immediately popular with his teachers, although they eventually come to learn to appreciate him for other, less assignment-related virtues.

Vincent has three older sisters who he speaks about from time to time although never by their names. He speaks often of his mother and things they do together. For example, he related his involvement with his mother during the summer collection of the fruit of the Saguaro cactus, which for centuries Papago women and their children have collected and cooked down for making into syrups and jams. Vincent's father, a laborer, also lives at home, but was not mentioned in any conversations with Vincent.

According to Vincent's mother, both she and her husband speak Papago. Vincent has good receptive control of his Native American language and has recently begun to take an interest in learning to speak it. His mother shared that when older people come to the door, Vincent tries to speak Papago to them. Vincent is intensely interested in the activities and lives of some of the tribe's medicine men. He has expressed a desire to become a medicine man when he grows up, which would necessitate him being fluent in Papago. He has asked his mother questions about becoming a medicine man and she has suggested tribal members he might seek out to learn more about this. During the course of the study, Vincent occasionally spoke with wonder and awe about some of his uncles who were medicine men and some of the events he witnessed or heard about in regards to the practice of their craft.

Vincent told the researchers that after school he spends most of his time playing outside. Occasionally, however, he will sit at the table and write while his three older sisters are doing homework. He sometimes reads at home and may bring stories from school to read.

Vincent seems generally to get along with his peers at school, but prefers somewhat older children as his close buddies. Although he lives in the principle town on the reservation near where the schools are located, Vincent is frequently absent, having "missed the bus." Vincent shared episodes of staying up late watching television which he explained was why he "got up late and missed the bus" on so many occasions. Vincent's overall appearance and behavior in school might lead an observer to conclude that his self-assessment is an accurate one. In the dynamics of classrooms with characteristic ups and downs, good days and bad, Vincent seems particularly vulnerable and sensitive to the classroom climate, displaying his more than usual seriousness when things go wrong. And his occasional succinct but accurate expressions of feelings about events or people reveal a quiet, understated affect of hurt or even anger.

It was not unusual, as the researchers entered the classroom, to see Vincent fulfilling a task as punishment for some prior misdemeanor or to see his desk removed from the classroom arrangement to a place by the chalkboard or by the teacher's desk. Vincent spent many number of recesses indoors having been directed to complete assignments.

Interactions

Year I

Interactions observed by the researchers between Vincent and his teacher, Ms. Howard, during Year I of the study was minimal except in cases where she would interrupt entire groups or the whole class to announce schedule changes, or to remind them to prepare for lunch. The few interactions observed directly were initiated by Vincent when he sought assistance in some way.

Episode 11/29/81

> The class was assigned to write about the Thanksgiving turkey. Vincent writes: IF I WAS A TURKEY I WOULD TRY TO RUN AWAY FROM THE PEOPLE WHO WOULD TRY TO KILL ME FOR A THANKSGIVING TURKEY. At this point Vincent announces to near by classmates, "I'm gonna quit." Nearby Daniel reads what Vincent wrote and says "you should have said 'I am a turkey.'" Vincent gets Ms. Howard and asks her opinion.She reads this beginning and proceeds to encourage him to continue by asking him to imagine how he would feel, what kinds of pictures are in his head. She has him talk to her about it, and then points out that he can add some of what he said into his piece of writing. Vincent returns to composing and eventually completes his piece by adding: I WOULD BE SCARED TO NOT HAVE A HEAD AND FEATHERS TO MOVE THEM AROUND AND HAVE NO LEGS TO WALK TO GO SEE SOME OTHER TURKEY.

Vincent's interaction with researchers during the composing process was often more extensive than with his teacher. He was particularly aware of what we were doing, frequently asking questions or making sure we were accurate about what he was writing. For example, on 11/5/81, a researcher was observing Vincent's story on the Papago rodeo. He writes in the line ..IT WAS TIME FOR THE BAREBACK RIDING.... As he comes to the end of the line, he squeezes in the G at the end of READING. Vincent typically squeezes letters in at the ends of lines instead of attempting to syllabicate words using hyphens. He briefly pauses in his composing and addresses Ms. Kasten, the researcher. "It's a little G at the end." He points to his G, waits until the researcher has caught up to him and written the word RIDING, and then he resumes his composing.

Vincent also used the researcher at times for a resource to help him make decisions about his writing. For example in a writing episode on 2/4/82, Vincent uses Ms. Wilde to help him get started. He has been assigned to write a fairy tale.

IN THE BEGINNING OF THE...Vincent starts writing and acts as if he doesn't know how to continue. Ms. Wilde asks him if there's a way fairy tales start? Vincent responds, "I don't know. I've never read a pirate fairy tale before. How do you spell once...oh, I know. He borrows an eraser from Frances who is sitting nearby, erases his first beginning, and writes ONCE THERE WAS SOME...

Then the following interchange takes place:

Vincent: PIRATES...how do you spell PIRATES? (he does not wait for a response, but rather continues writing.) What should I write next.

Researcher: What do you want to happen next?

Vincent: (pause) I know! (he continues writing and stops shortly.) How do you spell mountain?

Researcher: Spell it however you think it is spelled.

Vincent: I know! (Vincent gets dictionary, turns to the M section. As he looks through a page he is subvocalizing at the same time saying MMMM...OW...OW...) W would come next?

The researcher suggests he look for a picture of a mountain. Since there isn't a picture the researcher shows Vincent correct page and he finds the word. He copies MOUNTAIN onto his paper.

Throughout the study, Vincent never hesitated to use the proximity of the researcher as a resource for questions about his writing. Interestingly enough, he continued to ask about how to spell words although he never once in the course of study got a response from a researcher other than something like "spell it the way you think it is spelled."

On 3/4/82, the activities at the writing center in Ms. Howard's class demonstrates the support and interaction of a community of writers at work. The researcher joined Vincent and since the assignment was a free choice, she asked what he was going to write about. "I dunno," is his response. Nearby classmate Carl is already writing and Vincent and Carl talk about his story. Vincent then tells the researcher the plot of a movie he had seen. Suddenly, he begins to write. (The sections in capital letters indicate the text that Vincent is writing.)

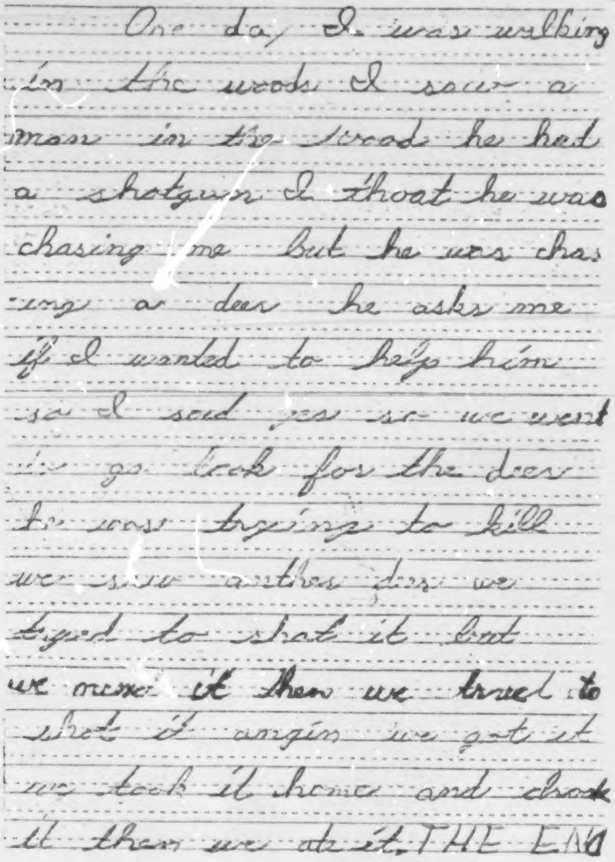
ONE DAY...Vincent stops to check the alphabet cards above the chalkboard to see how to make a capital cursive I. ONE DAY I WAS WALKING IN THE WOODS. I SAW A MAN...Vincent checks the cursive chart again and re-adjusts the M in MAN, then listens in on a conversation between Carl and James about a toy racing car....IN THE WOODS HE HAD A SHOTGUN..."Is this how you spell SHOTGUN?" he asks and looks over the manual observation form, perhaps to see if the researcher had spelled it the same way.

I THOAT HE WAS....Vincent stops and makes the A in THOAT (thought) neater....CHASING ME BUT HE WAS CHASING A...He stops again to check the cursive chart. Vincent wrote CHAS at the end of a line with the ING on the next line. The researcher asked him if he knew about hyphenation. They talked and Vincent hyphenated CHAS-ING. Then Vincent asked Walter and James how to spell DEER. They told him....DEER HE ASKS ME....Vincent stops to listen to James read his story aloud and comments on it. He then asks the researcher how much her bracelet costs and informs her that Danny holds his pencil the same way she does. Vincent demonstrates Danny's pencil hold for her....IF I WANTED TO HELP...

Alice brings Vincent his writing folder from the box where the folders are kept....HIM SO I SAID YES SO WE WENT TO GO LOOK...Vincent rewrites the K in LOOK and erases the period after it....OR...He erases OR and replaces it with FOR...FOR THE DEER. The teacher interrupts the class to tell them to get in line for an assembly. Vincent keeps on writing anyway....HE WAS TRYING TO KILL...Most of Vincent's class leaves the room to attend the assembly but those at the writing center continue to write...WE SAW ANOTHER DEER WE TRIED TO SHOT IT BUT WE MISSED IT THEN WE...

Aware of the other writers still at the center, Vincent asks Dana to read his paper. Dana, who is absorbed, chooses not to answer Vincent...TRYED TO SHOT IT AGAIN....Vincent leans across the table to listen to Dana read his story. Then he listens to Carl read some of his story. He then talks to Ms. Manuel, the teacher aide, about his mailbox number. As the other researcher is about to replay the tape of Dana's story that was just recorded, Vincent crawls up on to a desk to lie down and listen. After the tape stops, he returns to his writing....WE GOT IT WE TOOK IT HOME AND CHOOK IT HOM...Vincent erases HOM...THEN WE ATE IT THE END

Figure X-1 Vincent's Text 3/4/82



One day I was walking
in the woods I saw a
man in the woods he had
a shotgun I thoat he was
chasing me but he was chas
ing a deer he asks me
if I wanted to help him
so I said yes so we went
to go look for the deer
he was tyring to kill
we saw anther der we
tyed to shot it but
we misd it then we tried to
shot it angin we got it
we took it home and chook
it then we at it. THE END

One day I was walking in the woods .
I saw a man in the woods .
He had a shotgun .
I thought he was chasing me
but he was chasing a deer .
He asks me if I wanted to help him
so I said , " Yes . "
So we went to go look for the deer he was trying to kill .
We saw another deer .
We tried to shoot it but we missed it .
Then we tried to shoot it again .
We got it .
We took it home and cooked it .
Then we ate it .
THE END

Throughout this writing episode, Vincent and his classmates interrelate and interact as a community of writers. They use each other for discussions for pre-writing, to spell words, and to share finished stories. Vincent also uses the researcher and the cursive chart for resources for his writing. The writers became each other's audiences as well as their resources. The writing was too engaging and too powerful to end at the moment the class went to the assembly. It is as if the students knew that only writers can decide on good stopping places. Unfortunately flexibility in starting and stopping writing is not always permissible in classrooms.

Year II

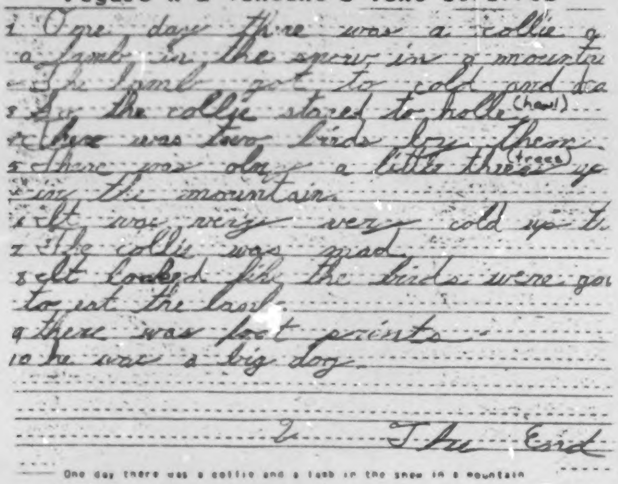
In Year II, we observed more incidents of Vincent interacting with people and seeking resources than in Year I, in spite of the fact that writing was not done in centers where people and resources were more readily available.

During the observation of 10/20/82, Vincent was assigned to use the words from the class weekly spelling list in a story. He began by asking Ms. Kasten, the researcher, how to spell a word. In keeping with the usual researcher response, she suggested that he do the best he could. Within the first fifteen words of his story, he consults the spelling list three times. Within the remainder of the story, he consults the spelling list three more times and the bulletin board once.

A similar episode occurs on 10/27/82 as Vincent has been assigned to write a story about the scene on a poster on the wall. The poster depicts a collie and a lamb on a snowy mountain.

While he is writing the first five words of his story, ONE DAY THERE WAS A...Vincent stops to listen to a conversation at the board between his teacher and the Papago teacher's aide concerning pronunciation of some Papago words. Vincent converses with a classmate on some topic unrelated to writing. ...COLLIE AND A LAMB IN THE SNOW IN THE...Vincent pauses here to check some words on the board for the spelling of MOUNTAIN...MOUNTAIN. THE LAMB GOD TOO COLD AND DIED. SO THE COLLIE STARTED TO... Vincent asks the researcher, "How do you spell HOWL?" Ms. Kasten responds by suggesting that he do the best he can on the spelling....HOWL. THERE WAS TWO BIRDS BY THEM....Vincent pauses again to ask a question about the tape recorder sitting nearby into which he'll read his story when he has completed his writing. Vincent's story continues for five more sentences. During that time he checks with the researcher and asks if she is on her second page of field notes yet. He then gets up to get a better look at the poster. He returns to his seat and adds a detail about there being footprints in the snow. He looks at the words on the board to check another spelling. He hurries to finish the last line since the class is lining up for lunch.

Figure X-2 Vincent's Text 10/17/82



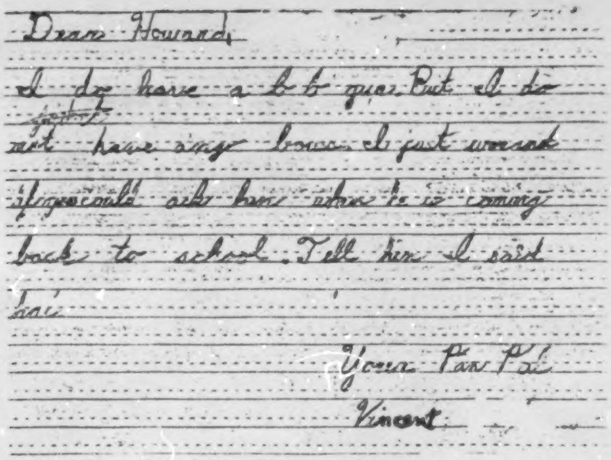
1 One day there was a collie a
a lamb in the snow in a mountai
2 The lamb got to cold and da
3 So the collie stared to holle (howl)
4 there was two birds by them.
5 There was olny a little threes (trees) up
in the mountain.
6 It was very very cold up th
7 The collie was mad.
8 It looked like the birds were go
to eat the lamb.
9 there was foot prints.
10 he was a big dog.
2 The End

One day there was a collie and a lamb in the snow in a mountain
.
The lamb got too cold and died .
So the collie started to howl .
There were two birds by them .
There were only a little trees up in the mountain .
It was very very cold up there .
The collie was mad .
It looked like the birds were going to eat the lamb .
There were footprints .
He was a big dog .
The End

On 12/1/82, Vincent is answering a letter to his pen pal, a fourth grader in an Arizona town off the reservation. Vincent begins this episode by asking the researcher to help him figure out something he couldn't quite decipher in his pen pal's handwriting. This was a new pen pal who wrote in the place of Vincent's intended pen pal whose letter was apparently missing due to absences from the other school. One of the researchers from Australia discusses kangaroos with Vincent who wants to know if Mr. Weatherill "talks on the weather." As he continues writing, he askes a nearby classmate, "How do you spell WANT?" The classmate spells it for him. "I don't have an eraser" responds Vincent even before his writing resumes, after which he finds one and makes a revision in his text and changes WANT to WONDERED. Two words later, he stops to ask about the two researchers he had not seen since Year I of the study. He then re-reads what he wrote, and decides he must add a YOU into the line he is just completing. He points out his revision to the researcher, in order to be sure she notes his revision on the manual observation form. In the rest of the writing episode, Vincent continues and completes this short letter. As he completes his letter, he says "there," as if in recognition of the completion.

Not all of Vincent's writing episodes include such a great deal of interaction. There were episodes where all interaction stopped after writing started and Vincent's writing was intense and uninterrupted until the end when he again acknowledged the fact that the researcher was present.

Figure X-3 Vincent's Text 12/1/82



Dear Howard,

I do have a b b gun. But I do not have any bows. I just [illegible] if you could ask him when he is coming back to school. Tell him I said hai

Your Pen Pal

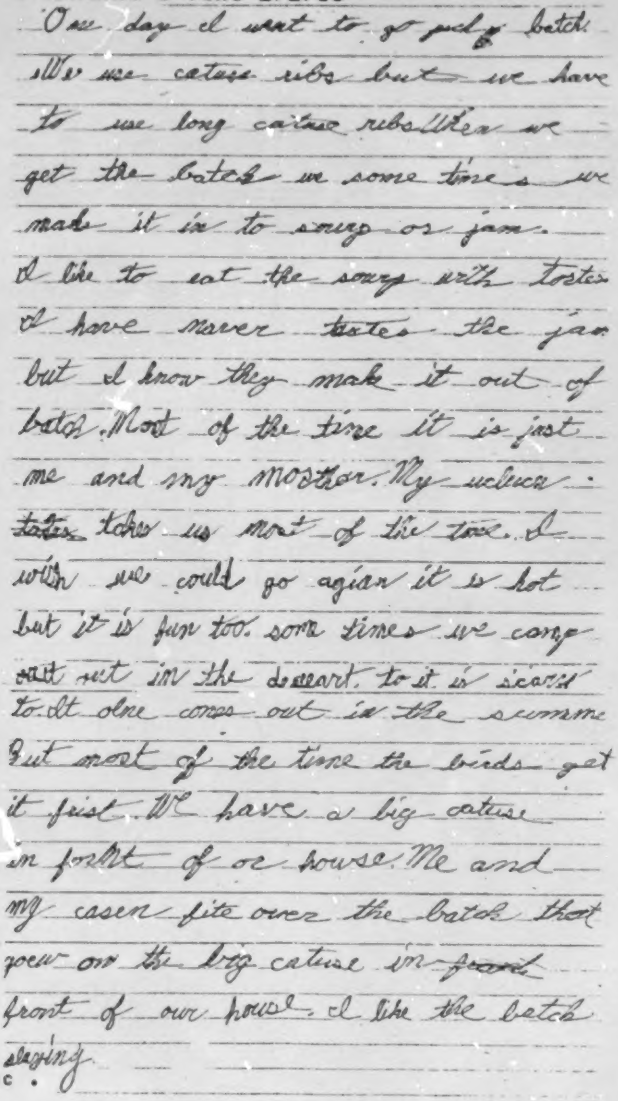
Vincent

Dear Howard,
I do have a b b gun .
But I do not have any bows .
I just wondered if you could ask him when he is coming back to school
.
Tell him I said hi .
Your Pen Pal , Vincent

For example, the day Vincent wrote about picking the bahidaj fruit of the Saguero cactus, Vincent began by interacting with the researcher about how to spell BAHIDAJ (which the researcher was unable to do.) After that interaction, Vincent wrote without interruption making only brief pauses to stop and think and for in-process revisions. He stopped once to change pieces of paper when he had filled the first one, and once to turn to look at class members who were making noise.

On 2/10/83, Vincent uses the researcher for pre-writing purposes. He had known about a particular assignment for about a week, because the class was assigned to write stories about the Southwest and to talk with families and other tribal members in preparation. Vincent starts writing...WHEN I GROW UP I WANT TO BE A MEDICINE MAN....Vincent appears stuck. "I'm trying to think how to make it into a story," Vincent said aloud. He changed one letter and then said "I don't know what else to write." The researcher suggests that Vincent could write some of the things that he had discussed wtih his mother prior to this assignment. "But I don't know how to make it into the story," Vincent repeats. Vincent decides to begin all over again. Vincent and the researcher discuss Vincent's intended audience. She suggests that many people might not know about medicine men, and that he could write to inform his audience. "But, who wouldn't know about medicine men?" Vincent queries with all sincerity.

Figure X-4 Vincent's Text 2/2/83



One day I went to go pick batch
We use catase ribs but we have
to use long caitase ribs When we
get the bates we some time s we
make it in to sorry or jam.
I like to eat the sorry with toster
I have never tastes the jam
but I know they mak it out of
batch. Most of the time it is just
me and my mosther. My ucluca:
~~tates~~ takes us most of the time. I
with we could go agian it is hot
but it is fun too. some times we camp
~~out~~ out in the deseart. to it is scarry
to. It olne comes out in the summe
But most of the time the birds get
it fiest. We have a big catuse
in forlt of or house. Me and
my casen fite over the batch that
grew on the big catuse in ~~frant~~
front of our house. I like the batch
slaying.

One day I went to go pick bahitac .
We use cactus ribs
but we have to use long cactus ribs .
When we get the banitac we sometimes make it into syrup or jam
.
I like to eat the syrup with tortillas .
I have never tasted the jam
but I know they make it out of bahitac .
Most of the time it is just me and my mother .
My uncle takes us most of the time .
I wish we could go again .
It is hot
but it is fun too .
Sometimes we camp out in the desert too .
It is scary too .
It only comes out in the summer .
But most of the time the birds get it first .
We have a big cactus in front of our house .
Me and my cousin fight over the bahitac that grew on the big cactus
in front of our house .
I like the banitac plain .
The End

The researcher suggests that most people, including herself, have very little knowledge of medicine men and might enjoy learning about them from his writing. Vincent ponders this before resuming writing. Vincent begins his second attempt by asking, "How do you spell GROW?" The researcher tells him that he'll have to spell everything himself. He writes WON'T and asks the researcher if his spelling is okay. The researcher indicates that it is. He changes WON'T to WENT and asks about how to spell WENT. THE Researcher again responds that he can spell it any way for now and it can always be corrected later. Shortly after, he revises a word SMOE (some) and says, "I'm going to write it better. I messed up on it." Later in the same piece he makes a revision on the word IF at the end of a line and looks over at the researcher's manual observation form and asks, "Is that the IF there?"

Although Vincent completes this piece on becoming a medicine man, he expresses dissatisfaction with it. After some discussion with the researcher, they decide that Vincent will gather more information at home and that he will write again on this topic the next time that the researcher is present. This is the only example of Vincent choosing to write a second time on a topic during the study. With a week of pre-writing behind him, Vincent settles down to his second episode after an initial conversation with the researcher. His actual writing on this occasion is characterized by one brief silent pause, 9 revisions related to spelling or handwriting and only 1 revision that changes the meaning of the text, He makes one brief oral comment on a spelling revision informing the researcher, "I messed up." In this episode, there are no other interruptions. Vincent's level of involvement in this story seems to be very intense and there is ample pre-writing time.

Vincent's interactions and behavior can differ from the ones described here when he is annoyed or unsettled about his assignment. An anecdote illustrating this will be discussed later.

Summary of Interactions

Vincent uses researchers, teachers, classmates, books, bulletin boards and anything else at his disposal when he writes. In some of his writing episodes, Vincent is so involved in his writing that he chooses to stop less than he usually does. One aspect affecting Vincent's interactions during writing seems to be how well he understands what is expected of him. For example, on one day in March during Year II, he has been assigned to write a journal entry. He is not sure what that means and there are many interactions with both the teacher and the researcher in an attempt to do the assignment. This writing episode is described more in detail later. On occasions where pre-writing was permitted and he had time to think ahead about assignments, Vincent seemed more engaged in his writing and interacted less with people and things around him. His interactions seem at times to serve a pre-writing function. At other times they seem to be avoidance stragegies for assignments he does not wish or does not know how to complete.

Instructional Context

Year I

In the following excerpt from an interview with Vincent at the end of Year I, he provides us with some important information about assignments and their effects on students and their writing. Vincent does not want to write gimmicky story starters. He wants to write his "own stories," the ones that he chooses, enjoys and has a voice in. When he dislikes the assignment, he also tends to dislike the finished product. He also reflects that in a longer story, he has an opportunity to get "the hang of it." He feels the longer stories are better writing.

Excerpt from Bi-monthly interview - Vincent, May 1982
Researcher: Do you think your writing is not as good now as it was before? Or is it better?
Vincent: Cause I never have anything to write...seems like I always...last time I wrote anything that I wanted to write on a different paper. I wrote and I ...you guys have it.
Researcher : Umm. But what about in the last three months? Since you've been writing this time? The writing assignments haven't been as interesting?
Vincent: I like to write my own stories.
Researcher: You like to write your own stories. So you think these over here..you got to choose these topics? And they're better? It's better writing do you think. What makes you think it's better writing?....
Vincent: ..this one's just a short one.
Researcher: Ok.
Vincent: I don't like to write short ones, I like to write long ones.
Researcher: Why the long ones?
Vincent: Because I just get..got the hang of it.

Excerpt from interview - 12/5/81

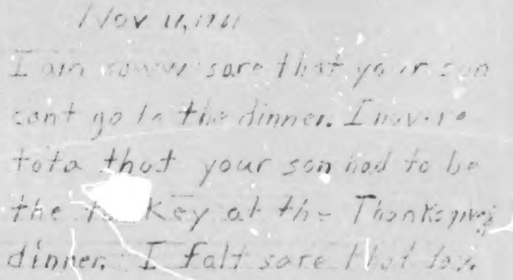
Vincent has just rank ordered his recent writing. The composition he rated as his least favorite was a letter to firemen who had visited the school and presented a fire safety program. He also refers to a piece he liked much better.
Researcher: Why did you put the fireman piece on the bottom?
Vincent: Cause it looks funny when I said "dear fireman, I..dear fireman I am glad, we are glad that you guys came to the...to show... I did it..then I didn't want to since I didn't know what else to write.
Researcher: Oh. Does sometimes, what you have to write about affect what you write? Do you know what I mean by affect? If you have one topic to write on, can you sometimes write more than if you have another topic?...
Vincent: Cause this one...this one (the narrative story) showed us a longer piece than this one (fireman, thank you letter) and we didn't hardly get any ideas what to write in this one (fireman, thank you letter).
Researcher: There are not as may ideas in this one?

Vincent: Uh-huh (yeah)
Researcher: I see.
Vincent: And this one there's lots. (Vincent refers to a story he rated higher than fireman piece)
Researcher: Ok. So you had more ideas when you wrote this piece. (other story) Does having more ideas make a piece better?
Vincent: Uh huh (yes)

If teachers took the time to write the assignments they give their students, they might discover what Vincent has discovered. For some topics, there just isn't much to say. Assignments can influence writers by offering constraints on the composing process. When a writer is restrited to a narrow topic, he or she may discover there is little to say.

Vincent similarly faced the problem of a narrow topic just before Thanksgiving. The assignment was to write a sympathy letter to the parents of the turkey on the Thanksgiving menu. Vincent discovers it is hard to find enough to say to fill his paper and satisfy his teacher.

Figure X-5 Vincent's Text 11/17/81



Nov 17,1981
I am sowo sore that your son
cant go to the dinner. I never
tota that your son had to be
the t[illegible]key at the Thanksgiving
dinner. I falt sore that day.

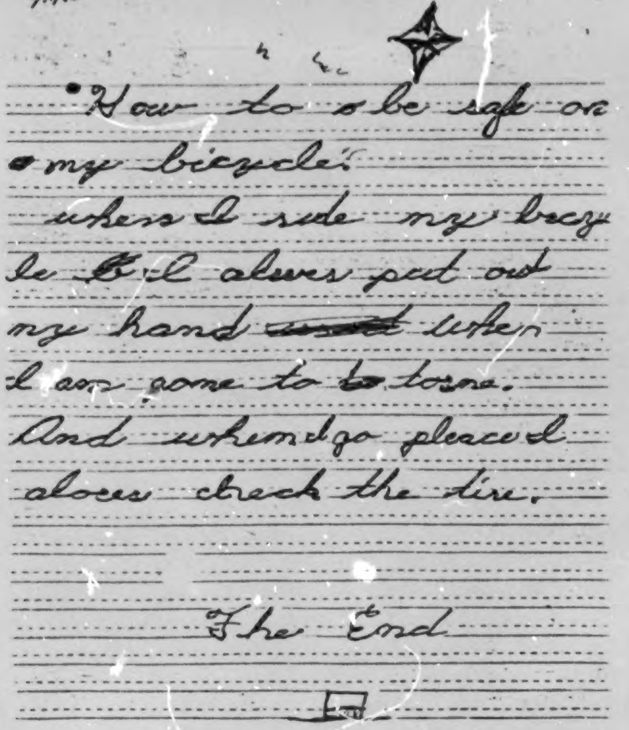
Nov. 17, 1981
I am so sorry that your son can't go to the dinner .
I never thought that your son had to be the turkey at the Thanksgiving dinner .
I felt sorry that day .

Assignments can constrain writing for other reasons. Sometimes students are required to write on topics for which they have very little knowledge. The researchers saw an example of this in November when the third graders were asked to write as if they were Pilgrims on the Mayflower arriving in the new world, meeting the Indians. This situation was remote at best, in spite of a few lessons about the Pilgrims and the first Thanksgiving. These subjects who live in a land-locked state on a hot, southwestern desert may find difficulty pretending to be on a boat, arriving in a cold, hilly snow-covered New England. Then there's the irony that they've been asked to be the Pilgrims meeting the Indians, when our subjects are Native Americans.

Another occasion of knowledge constraint occurred when the class was assigned to write about bicycle safety. Vinent's piece reflects a limited knowledge of bicycle safety issues.

Figure X-6 Vincent's Text 5/11/82

5/11/82



How to be safe on
my bicycle.
when I ride my becy
le ~~B~~ I alwes put out
my hand when
I am gone to ~~to~~ torne.
And when I go pleace I
alwes check the tire.

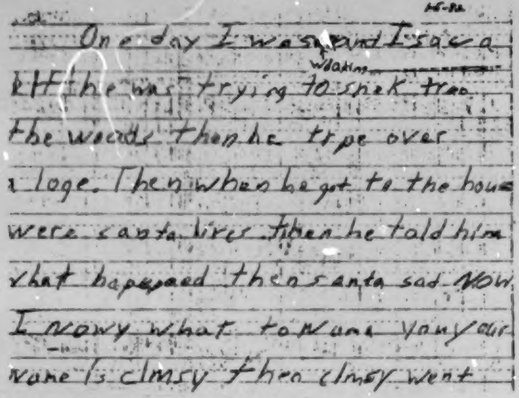
The End

How to be Safe on My Bicycle .
When I ride my bicycle I always put out my hand when I am going to
turn .
And when I go places I always check the tire .
The End

Vincent wrote what he knew about bicycle safety. Perhaps he wrote all he knew about the subject. The issues might be different if these students lived in a traffic congested city. But our subjects live in a rural, sparsely populated area.

It is probably not surprising that Vincent's longest stories in Year I are the ones where he chose his topic or found the topic appealing. The writing is more fluent and has a plot. Both of the following stories are the longest ones that Vincent wrote in Year I. On January 5, he was assigned to write a legend about how one of Santa's elves got his name. On the narrative rating scale, this story was rated a 3 out of 4 on plot and events, characterization, setting and general quality. The selection written on April 13th was an unassigned story. Vincent wrote a personal narrative about a race. This composition was also rated 3 out of 4 points in all areas of the narrative rating scale. The contrast between the two is interesting.

Figure X-7 Vincent'e Text 1/5/82



One day I was and I saw a
wlaking
elf he was trying to snek trao
the woods then he trpe over
a loge. Then when he got to the hous
were santa lives then he told him
what hapepaed then santa sad Now
I nowy what to name you your
name is clmsy then clmsy went

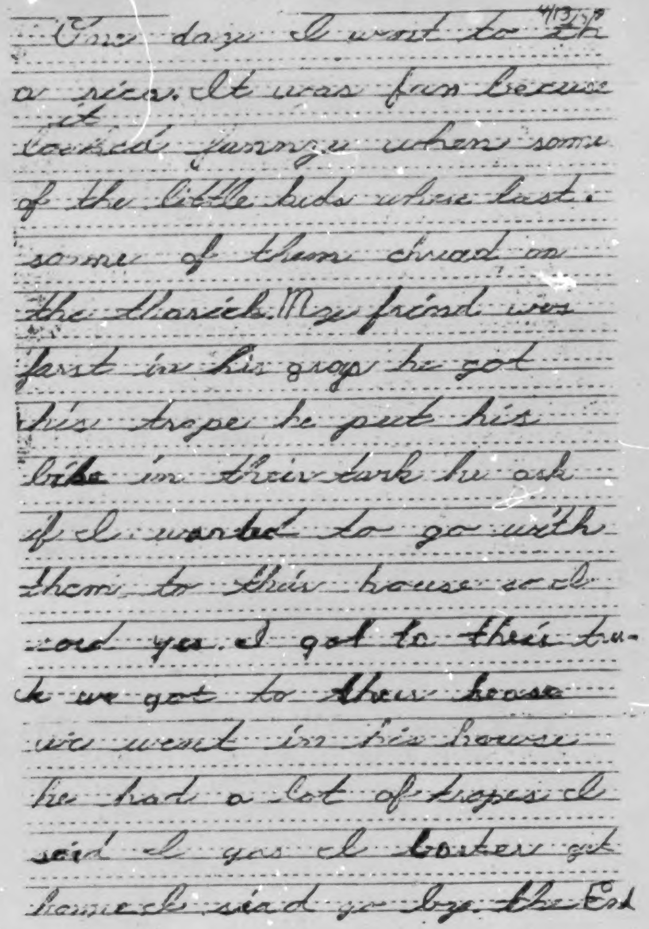
One day I was walking
and I saw an elf .
He was trying to sneak through the woods .
Then he tripped over a log .
Then when he got to the house where Santa lives , he told him
what happened .
Then Santa said , " Now I know what to name you .
Your name is Clumsy . "
Then Clumsy went out to tell everybody his name .
They celebrated because he finally had a name .

It was the observation of the researchers throughout the year that the types of assignments helped to determine the outcome of the compositions. When students had opportunities for choice, to develop a voice, to say something they felt was important to them, and could write about what they knew, the writing was longer, more logical, had plot and made sense. The less the students knew about the form of the writing or the topic they were writing about, the more likely the result was to be a brief piece of writing which did not seem to satisfy its author.

Students also react to praise for their writing. But they seem to want more. They seem to want not only positive response but an interested audience. On 5/18/82 during an interview, Vincent finds it difficult to predict how Ms. Howard would rank his recent writing. The researcher asked Vincent which piece his teacher would have put on top.

Vincent: I don't know.
Researcher: You don't know. What does she..what kind of stuff does she like best?..that you do?
Vincent: About all she says is just good. She says that to all of them.
Vincent: When she says...Everytime I'm writing she says its good and they're ... they're all...all the ones that she sees are good and all the ones that are not...Everybody knows that they're all good to her.

Figure X-8 Vincent's Text 4/13/82



4/13/82
One day I wont to th
a rica. It was fun becuse
it locked funny when some
of the little kids whre last.
some of them chrad on
the thrack. My frind was
first in his grop he got
his trope he put his
bike in their turk he ask
if I wanted to go with
them to their house so I
said yes. I got to their tru-
ck we got to thew house
we went in his house
he had a lot of tropes I
said I gos I botter get
home I siad go bye the End

One day I went to a race .
It was fun because it looked funny when some of the little kids were lost .
Some of them crashed on the track .
My friend was first in his group .
He got his trophy .
He put his bike in their truck .
He asked if I wanted to go with them to their house .
So I said , " yes . "
I got in their truck .
We got to their house .
We went in his house .
He had a lot of trophies .
I said , " I guess I better get home . "
I said , " Goodbye . "
the End

Ms. Howard no doubt believed she was doing the right thing by praising all of Vincent's work to encourage him as a writer. But Vincent has been writing for long enough to be critical of his own work. He would benefit from some sincere criticism and suggestions concerning how he could write better. Vincent's comments seem to indicate that he would appreciate an interested audience that would say something in addition to "it's good" in order to help him grow as a writer. From Vincent's insightful comment we can learn more about the instructional context of this classroom.

Year II

The instructional/learning environment of a classroom can have a significant impact on a student. As was explained in the first section of the chapter "Background and Personal Data," Vincent operates by his own agenda in school. Vincent found it difficult to adjust to some of the new types of confinements of the Year II classroom. He was frequently punished or isolated from friends for behavioral issues. Although Vincent's general competence as a writer developed, he had little interest in much of the assigned writing of his fourth grade year. He had little opportunity to "write his own stories." Absences from school were more frequent and his attitude toward school became increasingly angry. There was little feedback and genelly no audience for Vincent's writing. Early in the study he was able to supply the researchers with his ideas and opinions about writing, but his Year II interviews are characterized by boredom and frustration.

As was discussed under Year I, assignments can constrain writers in various ways. The following anecdote which occurred on 3/23/83 was in relation to Vincent being told to write "a journal entry." Journals had not been used in the classroom since the beginning of the year. Vincent did not understand what the teacher wanted.

Episode 3/23/83

Vincent had seemed unsettled from the first time the researcher took him out of the room for his interview. As the researcher pulled a chair up to his desk to sit and watch the writing episode, Vincent is up and down in his seat three or four times getting the right kind of paper, sharpening his pencil, asking his teacher a question, etc. He finally sits down. "I don't know what to write about. How do you write in a journal?" Then, half out of his seat, he taps the shoulder of the girl sitting next to him with his pencil. He repeats the question to his classmate "How do you write in a journal?" "I don't know", the classmate replies emphatically, wincing from the uncomfortable pencil tap on her arm. The researcher intervenes suggesting that journal topics can be about something that has happened in his life or perhaps something that is going to happen. Vincent makes no response as he continues to squirm and to change from a seated to a kneeling pose in his chair every few seconds.

This was the first time in the researchers' presense that the idea of journal writing had become an instructional activity since it was introduced the previous September. Although it had been the teacher's intention to institute journal writing on a daily basis, it never became an ongoing activity.

The researcher continued to urge Vincent to write in his journal with a suggestion that he could write about what he might do on the upcoming spring break. Anxious to get this all over with, Vincent put his pencil to his paper and writes OR SP. "How do you spell SPRING?" Virgil asks rather hurriedly. As usual, the researcher tells Virgil to do the best he can to figure it out. He crosses out the SP on his paper. "What do I write?" He pauses. "How do you spell "Spring?" He then begins to spell aloud, S-P-E-R-K-I-X-I-N-G... I'll spell it anyway" There is a note of "I don't care" in his voice. Then he spells aloud "V-E-A-N-A-C-I," which is intended to be VACATION. After a short pause he says as he writes "have a good time.' His paper now reads: ON SPERKIXING VEANACT (spring vacation) I AM GOING TO HAVE A GOOD TIME. "What else do I write?" Without waiting for an answer, he gets up, goes to the back of the room to ask his teacher a question. The answer was loud enough to be heard. "I don't know this, but it still has to be done," is the message. He comes back and turns his paper over to start again. Vincent writes ON on the new side of the paper. "How do you spell Spring?" he begins again like a repeat performance. This time Vincent doesn't wait for a response. He writes SPRING. He gets up and goes to the back of the room, presumably in search of a correct spelling. He asks his teacher if SPRING needs to be capitalized. She says no. He comes back to his seat and erases the entire word. He writes down V. "How do you spell vacation?" At this point the teacher interrupts the entire class. She asks all the kids who think they accomplished some work to stand up. By this time, Vincent has added a spelling for VACATION, and his text continues I MIGHT HAVE NOT NOTING (nothing) TO DO NOBEY (nobody) I MIGHT WATCH... Vincent stands up. He writes T.V. on his paper. "There, I'm through. I can't write anything. I'm not in the mood to write."

This incident, which is full of frustration, off task behavior and very little writing, involves a student who is somewhat angry because he doesn't understand the teacher's expectation and who is not "in the mood to write."

Fortunately for Vincent, during February, just prior to this incident, Ms. Pagett and the class were writing stories about the southwest for an area writing contest. Vincent, who is proud and aware of his native Papago culture, found something he cares to write about. For several weeks, his writing becomes deeply personal and even emotional. It was at this point, in several long dialogues with one of the researchers, that Vincent expressed his deep-felt desire to become a medicine man for his tribe when he grows up. He relates to the researcher accounts of visits to his home by medicine men. Within this time period, Vincent writes two stories about wanting to become a medicine man and another one about the fruit from the saguaro cactus (mentioned earlier).

With March interruped by spring breaks, and the data collection terminating in April, there were only a few stories collected from

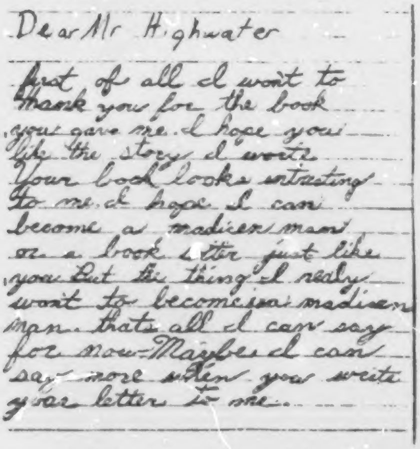
Vincent after his stories about his personal cultural experiences. Ms. Pagett, Vincent's teacher, encouraged his interest at this time by steering his reading selections to Native American authors. She reported that one paperback she loaned him never came back to school. But that perhaps it was one book she didn't mind losing if it meant something special to Vincent.

The last day Vincent was observed writing ended on a hopeful note. One of the researchers heard native American author Jamake Highwater speak at a conference. Deciding that Highwater had something in common with Vincent, the resercher purchased one of his novels, ANPAO, had the book autographed for Vincent and told Highwater all about him. Highwater was delighted to hear of Vincent's desire to become a medicine man.

That last data collection episode was also a trip to deliver the book. It was presented to Vincent as a gift for the writing he had done for the researchers. Vincent was somewhat awed to see his name written by the author in the front of the book. He asked that Highwater's message be read to him, as the stylized handwriting was difficult for him to read. "Read it to me, again." he asked, wishing to hear the message over. It said, TO VINCENT ..., THIS IS THE STORY OF YOUR PEOPLE. DO NOT BE AFRAID OF WHAT YOU
ARE BECOMING. JAMAKE HIGHWATER.

The researcher asked Vincent if he'd like to write a letter to the author. He nodded saying nothing. The researcher told Vincent that Highwater was interested in seeing some of his writing and that his best story could be sent with the letter which Highwater had promised to answer.

Figure X-9 Vincent's Text 5/11/83



Dear Mr Highwater

first of all I wont to
thank you for the book
you gave me. I hope you
like the story I wrote
Your book looks intresting
to me. I hope I can
become a madicen man
or a book writer just like
you But the thing I realy
wont to become is a madicen
man. thats all I can say
for now. Maybe I can
say more when you write
your letter to me.

Dear Mr. Highwater .
First of all I want to thank you for the book you gave me .
I hope you like the story I wrote .
Your book looks interesting to me .
I hope I can become a medicine man or a book writer just like you .
But the thing I really want to become is a medicine man .
That's all I can say for now .
Maybe I can say more when you write your letter to me .

Vincent's story was enclosed with the letter.

Figure X-10 Vincent's Text 2/23/83

One day I went to the rodeo .
And then I saw a man riding a bull .
Then the man flew off the bull
and the clown helped the cowboy .
It was time for the bareback riding .
I went to sit on the top of the bleachers to see the bareback riding .
The men were saddling the horse .
Then the bareback riding was over .
They announced the winners .

Concepts of Writing

The CONCEPTS OF WRITING interview was administered four times within two years; it was given at the beginning and near the end of each year. It is difficult to determine to what degree these interviews reveal our subjects' personal ideas about writing, or if they mirror what the subjects perceive to be their teacher's values about writing.

It would seem as though student's concepts of writing cannot be separated from the instructional context of the classroom. Their concepts reflect the classroom values as they learn how to succeed in that context. In Vincent's case, his comments were related to how he saw his writing being evaluated and how issues in writing were treated. When a teacher circled all his spelling errors and remarked on his sloppy cursive handwriting, Vincent concluded that good spelling and good handwriting were important aspects of good writing. When discussions of writing assignments stressed deciding what to say and thinking about how to say it, Vincent inferred that good writers must think hard about their work. All aspects of classroom practices are based on beliefs. Teachers decide what to do based on what they believe is important about learning and about the content of instruction. If the basis of evaluation focuses on mechanics of writing, then students will learn to value mechanics in order to (hopefully) succeed in the classroom milieu. If teachers want their students to value something besides mechanics, then it is important to examine what is said and done in the classroom in relationship to talking about and evaluating writing

Following are some excerpts from interviews with Vincent that demonstrate some of his beliefs about writing at different times during the study.

In Year I when Vincent was a student in Ms. Howard's class. When Ms. Howard had editing conferences with students. During these conferences, the researchers generally observed corrections being made on the original copy in spelling, capitalization, and punctuation. After these one-to-one sessions, students were generally expected to copy their composition over, observing all the corrections made.

Year I Concepts of Writing Interview 11/27/81

Researcher: Who's a good writer that you know?
Vincent: Mike
Researcher: Why? Why is Mike a good writer?
Vincent: Because he always helps me write what I wanna write.
Researcher: What kind of questions do ya' usually ask him?
Vincent: How to spell stuff...
Researcher: What does a good writer need to know to write well?
Vincent: He needs to know all the...the words, how to spell them.
Researcher: How can you tell when somebody's a bad writer?
Vincent: One thing...um they misspell words.

At this time Vincent's idea of good writers and good writing focuses on the ability to spell correctly. It is interesting to note that spelling was of primary concern to his teacher in their editing conferences.

Year I Concepts of Writing Interview 3/11/82

Researcher: Who is a good writer that you know?
Vincent: Um...Frances.
Researcher: Ok. What makes Frances a good writer?
Vincent: 'Cause, she knows how to spell some words..
Researcher: Ok.
Vincent: ...that I don't know.
Researcher: Ok. Can you think of other things that might make her a good writer?
Vincent: Sometimes she don't have to...look at things ...and see what they're spelled... She just spells them out... And sometimes she gets them all right.
Researcher: Ok. What does a good writer need to know or to do in order to write well?
Vincent: Have to...you have to write good handwriting
Researcher: How can you tell when somebody's a bad writer?
Vincent: When they write sloppy and when they misspell all their words.

Vincent's responses parallel the values demonstrated in the instructional context. In Year II, Ms. Pagett made statements to the class early in the year about how she valued their writing being clear to a reader and making sense logically. She had plans to hold conferences with students on the context of their writing. The researchers were able to observe a conference where Ms. Pagett was expressing to a student, "I am having difficulty as a reader understanding exactly what you mean here. Could you read this part over and decide if there might be a way to make it clear?"

Vincent's first Year II interview went like this:

Year II Concepts of Writing 9/82

Researcher: Who's a good writer that you know?
Vincent: Blaine
Researcher: Ok, why do you say that?
Vincent: I don't know
Researcher: What makes him a good writer?
Vincent: He just writes a lot.
Researcher: What do you think a good writer need to know in order to write well?
Vincent: He needs to know what he's going to write.
Researcher: What else?
Vincent: They have to think hard.
Researcher: How can you tell when somebody's a bad writer?
Vincent: They make mistakes.
Researcher: What kind of mistakes?
Vincent: They don't...they put...they just write anything on their paper.

Now in Vincent's concepts of writing, thinking about the writing has become a concern. Bad writing is no longer sloppy writing with misspelled words, but rather writing that gets put down on paper without much thought behind it. Although very little conferencing was observed in Year II, different values about writing were expressed. This may have been because spelling words were not corrected as a part of the writing assignment. When Ms. Pagett talked about writing, there was a focus on deciding what to write about. Even in the last interview, Vincent continues to reflect those values that were demonstrated to him through instructional practices.

Year II Concepts of Writing 9/29/82

Researcher: Who is a good writer that you know?
Vincent: Dana
Researcher: Why?
Vincent: He writes good stories
Researcher: What makes them good?
Vincent: Cause he writes about all different kinds of stuff...he writes long, he writes all different kinds of stories.
Researcher: What does a good writer need to do or need to know about in order to write well?
Vincent: Um - know what he's going to write write about - and um - they have to think about it before they write it.
Researcher: How can you tell when someone's a bad writer?
Vincent: When they...um...like if they make too much mistakes and they don't think about what they write, they just write anything.

Orthography

Until February in Year I, all of Vincent's writing is in manuscript. The rest of year I data is generally in cursive except when Vincent was asked to write a letter to the second grade in-coming class, which he chose to do in manuscript. When Vincent's stories are written on primary paper, his handwriting is large and sprawling. The stories that are written on narrow-lined composition paper show a more compact writing that suits the paper appropriately.

Vincent expresses that he does not care for cursive writing. In Year II Ms. Pagett required the fourth grade to write in cursive. Consequently, all his stories are written in cursive except one which was written the day the teacher was absent.

Vincent's writing shows appropriate directionality with the exception of an occasional reversed letter. For example on March 4th, in Year I, Vincent reversed the capital D in THE END.

Earlier in Year I, Vincent's spacing of text is somewhat crowded and word boundaries are sometimes unclear. In line 5 and line 7 of his 11/5/81 piece (see Figure X-10), it is not clear to the reader whether Vincent intended BAREBACK to be one one word or two words. On lines two and three of the same piece, the spaces are inconsistent and sometimes crowded. The handwriting on the primary paper is large and child-like.

Vincent's March 17, 1982 writing on composition paper (see Figure X-11) shows some differences in the use of space. There are still times, (like on the tenth line) when it is difficult for a reader to see where words are separated. But Vincent seems to generally be willing to leave more space between his words. It is also interesting that his handwriting is considerably smaller and more mature looking.

Both the above examples are fairly typical of Vincent's spacing in terms of magazines. The earlier piece seems to hug the edge of the paper and use all the space available. There is more of a sense of edge spacing in the latter of the two pieces, but margins are still not clearly defined. Vincent's writing is inconsistent where margins are concerned. Sometimes there seems to be a clear left margin, but none on the right. At other times it is just the opposite.

Vincent does not attempt to divide words from one line to the next until near the end of the Year I. In April, he divides the word TRUCK with TRUC on one line and the K all be itself on the next line of text. In May he divided words on two different occasions. First he divided BICYCLE by ending one line with BICYC and beginning his new line with the LE. On a second episode, he wrote HOMEWORK by fitting HOMEWOR on one line and assigning the lone K to a new line of text. Vincent did not attempt to use any hyphens to divide wores in text in Year I.

Vincent's Year II data, almost entirely in cursive, has somewhat better spacing. Word boundaries are generally more clearly defined, but margins continue to be inconsistent. As in Year I, Vincent's handwriting conforms to the size of the lines of the paper.

Vincent expresses to the researchers that he has a preference for writing with pencils in lieu of pens because he feels he can be neater.

In Year I, Vincent writes about 1000 words in 16 stories. All in all, 81.8% of his spelling is conventional in spite of the fact that neither Vincent nor his teachers consider him to be a good speller. There are only seven instances of letter formation problems which include one small "b" for a "d", five small "d's" for lower case "b's" and one backwards capital D. Vincent's punctuation is conventionalized about 28% of the time that punctuation is necessary. He controls periods more than commas. He has not yet started to use exclamation, quotation or question marks.

Syntactic and Semantic Development

In December of Year I, Vincent was assigned to write A CHRISTMAS STORY. His story is as follows:

Figure X-11 Vincent's Text 12/8/81

One day Santa went to play baseball with the man at the baseball field .
He hit the ball in the gate
and it bounced and broke a window .
And on Christmas he came down the chimney and brought a window out of his seck and put it on the broken window . ThE END

This story is 53 words and four T-units long. Vincent's writing shows complex syntax in Year I.

In Year II, Vincent writes 1,189 words in 13 stories. A total of 1033 words are spelled conventionally, or 86.88% of words used. A total of 156 words were spelled unconventionally, 13.12% of words written. Vincent generally controls high frequency words. Words that Vincent uses more than ten times during the year are spelled conventionally with the exception of were/where, there/thare, and want/went. However few words are never nonconventional more than three times. The only invented spellings that are repeated more than three times are TOO for TO and a papago word "bahidaj" (Saguaro cactus fruit) which is not normally written down. Vincent invents the spelling as "batch" which he uses five different times. (researchers had to consult a Papago linguist to find a correct spelling for "bahidaj" since the Papago language has only recently been written.) Most of the words with invented spelling only appear one or two times in writing during the year. Some examples include:

> ASTRONAUT (astarernot, astareranat) ANNOUNCED
> (anas[illegible]) CRASHED (chriao) CELEBRATED
> (slod.at), FEATHERS (fortdrs) HAPPENED
> (hapepaed) PEOPLE (poelp), SCARED
> (skered) THANKSGIVING (Thanksgiving)
> TRACK (tharick) and WATCHING (witching)

Vincent has almost no letter formation problems in Year II. The few that do exist all involve learning certain letters in cursive, usually lower case "m." All of his capitalization problems involve omitting a capital letter from the beginning of a word where it is needed. Most of these involve the first word of a sentence.

Vincent is still experimenting with punctuation use throughout Year II. For example, there are 105 incidents where punctuation was used conventionally, and another 149 incidents of places where punctuation was obligatory but omitted. It is interesting however, that there are only 3 incidents of punctuation use where Vincent decides to use punctuation and his decision is not conventional. And similarly, only four incidents of punctuation are inserted in a place where punctuation is unnecessary. In Vincent's writing, he most commonly omits periods and commas from places where they are obligatory.

The narrative writing scale which was used to evaluate the narrative writing of the subjects showed Vincent's development to be saltatory rather than progressive. There are examples of stories with high ratings early in Year I, as well as stories with lower ratings through the first half of Year II. In the latter part of Year II, Vincent's stories were rated consistently high on plot and events as well as general overall quality. Story elements like setting and characterization were less consistent. This may not necessarily reveal a weakness in this writer. The appropriateness of the existing semantic rating system used for this study is not equally adequate for all kinds of narrative writing. For example, on 2/23/83, Vincent's narrative writing is about wanting to be a medicine man when he grows up. Although his is a form of personal narrative writing, it does not lend itself to being rated on development of plot, characters, and setting. Similarly, on 4/13/83, Vincent writes a lenghthy account of his field trip to the Sonoran Desert Museum. This first person narrative has no real need for character development. A CHRISTMAS STORY contains 2 main clauses and one adverbial clause. In addition, Vincent has written with 5 conjoined clauses, and six prep phrases in this relatively short piece.

Near the end of Year I, Vincent's assignment was to write about a Disney character. (See Figure X-12)

THE DONALD DUCK story is 73 words long, organized into 9 T-units. It has 7 main clauses, 2 nominal clauses and 4 conjoined clauses. This time, his piece has 4 modified noun phrases, 4 complex verb phrases and

3 prepositional phrases. This is in addition to 15 regular noun phrases, 9 regular verb phrases and one adverbial phrase.

In Year II, Vincent's story on December 8, 1982 was 137 words long. Within the 17 T-units, there are 17 main clauses along with 3 adverbials, 5 nominals, and 2 conjoinings. In addition, there are 26 noun phrases, 9 modified noun phrases, 15 verb phrases, 9 complex verb phrases, 2 adverbial phrases, 6 prepositional phrases, and one idiom. This story contains dialogue and has the subordinate clauses dispersed rather evenly throughout the text. In the last piece discussed, THE DONALD DUCK STORY, the subordination did not begin until after the first few sentences.

Vincent's writing has an average of 1.73 clauses per T-unit for Year I and an average of 8.5 words per T-unit. In Year II when Vincent was in grade four, his average clauses per T-unit decrease somewhat from Year I to 1.58 and his average words per T-unit is 8.8 showing only a small increase. However Vincent's data in both Years is higher than average of Hunt's grade 4 subjects who show a mean of 1.3 clauses per T-unit and 8.6 words per T-unit.

These measures of words per T-unit and clauses per T-unit are most likely a more useful index of writer change when used in the context of an entire group of writers over a period of time because of the many influences on any particular text at any point in time. For example, in spite of Vincent's rather sophisticated use of subordination in Year I, there are a few select stories that differ from what we normally expect in Vincent's writing. His piece on BICYCLE SAFTEY (See Figure X-7) has an average of 2.5 clauses per T-unit and 17 words per T-unit. This might appear outstanding if one does not know that the composition is only 2 T-units and 36 words long. This was not a piece of writing that Vincent particularly enjoyed or was particularly engaged in. Another piece of writing was a Haiku poem. Assignments that have different kinds writing will influence T-unit analysis in different ways and for any one piece of writing more insights need to be considered than simply statistical information.

Summary

Vincent is an unusual student, with depth, thoughts, and questions that reveal an insatiable curiosity about life. And yet he seems to have little desire to please teachers and a general unwillingness to play the school game in order to succeed. Vincent may emerge from his schooling with knowledge and learning separate from the intended curriculum. Vincent may learn to value schooling when he encounters a teacher who values and respects his unique curiosity. This may help build in Vincent a love of learning. The adults in Vincent's life in the next few years will critically influence the direction of his energies and his life. Vincent needs a Mr. Isobe, the teacher in CROW BOY by Taro Yashima (1978) whose care and concern helps to make a difference in the life of a young school boy who is different than his peers.

CHAPTER XI

RACHEL

by David Weatherill

Social context for Writing

> If the student writes both better and more easily when he has a real occasion for writing than when he composes an exercise to exemplify some rule for composition previously enjoined upon him, then let the teacher, so far as possible, replace the artificial situation by natural conditions for writing.(Gertrude Buck, 1901, p. 372)

The young dark haired girl scans the list of assignments provided for her by the class teacher. The list includes an exercise in spelling from the spelling text, a mathematics ditto sheet, an exercise on dictionary words, and finally a writing activity. The scanning is over and the young girl orders the activities according to her needs. On the bottom of the pile she places the writing activity. For the next two hours she will work her way through these assignments and place the finished work in the basket provided by the teacher. The writing activity involves completing a scribble picture by turning it into a creature, colouring it in, plus writing a story about it. Today's writing will amount to six lines being made up of four sentences. There will be no revision or re-reading. The writing is finished and then placed in the teacher's basket. Rachel does not really enjoy writing at school. Her writing depends upon her mood, plus the type of assignment.

Yet Rachel is a child who does use the writing process in order to pass on her thoughts to others. A good deal of her writing though is done out of the school context. She has three grown sisters in Colorado that she writes to regularly. This writing activity has reached the stage where she needs to use a different media - the typewriter. She taught herself to type by touch fairly rapidly, in order to write to her sisters. The school does not realise that Rachel does undertake this form of writing.

Rachel is a quiet dark haired girl who works fairly quietly in the classroom. She talks to her cousin, plus other children around her while she is working, usually stopping the work to talk about something outside the classroom context. Her mother is Navajo and her father, Papago, so they use English in the home setting. Rachel is the only child left at home. Her younger brother who was both physically and mentally handicapped, died in 1982. Rachel took a long time to get over this event as she loved her brother.

At home Rachel assists with the cooking and cleaning. Both her parents have disabilities and need her assistance. Rachel's mother reads a great deal and has many books in the home, but Rachel does not read very much at home. Most of the time she watches television as she

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has her own set in her bedroom. Rachel occasionally brings home her stories or work and talks about them to her parents, but she doesn't like doing any homework as she would sooner be outside playing.

What happens at school is rarely discussed at home. On occasions Rachel will discuss some of her work with her parents, but normally she finds other things to do. Her father is trying to interest her in the Papago language. He has a paperback reader written in both Papago and English which he has been studying himself and he would like Rachel to learn to read Papago. Around Rachel's fourth grade classroom, there are cards showing certain aspects of the Papago language written both in Papago and English. Ms. Pagett hopes to encourage the children to use their native language whenever possible. So the message from the teacher and Rachel's father is the same - remember that you are a Papago and have a language and culture unique to yourself.

Rachel is considered an average student by her teachers. She is a quiet child, mainly being involved in oral language with her teachers when they ask her direct questions. Rachel does tend to talk with the children who work in the group around her. She tends to complete the bare essentials of the assigned work. Occasionally she shows that she is capable of using written language far beyond what she normally does. Both of these times were in response to a film shown in the classroom, which she then wrote about. On one of these occasions she produced a four page piece of written work which was well above the normal four or five sentences to one page she normally produced This shows her ability to use written language when the motivation and interest are there.

It is a long school day for Rachel who lives 20 miles from the school. She catches the school bus at the Mile Seven post (seven miles from the Mexican border) at 6 am and arrives back home at 4 pm. In order to catch the school bus she has to arise before 5:30am. The school bus makes nine stops before arriving at the school just a little after 6:30 am. giving Rachel an hour and a half to fill in before school commences.

During the two years of the research, Rachel wrote 33 pieces of work observed by the researchers. Of the 33 pieces 18 were written during the first year of the study, while 15 were written during the second year.

Rachel was in Grade 3, during the first year of the research study and during the second year of the study was promoted to Grade 4 and moved to the middle school in the district. Hence Rachel was influenced by two different teachers and schools who held different views concerning the role of children's writing. The differing views are reflected in the type of writing that Rachel produced. In Grade 3, Ms, Howard saw the writing component of her language programme as part of her Social Studies curriculum. Unassigned writing was encouraged in the children's journals for a short period of time, but the bulk of the writing was part of social studies units being undertaken for a week or more. The view of the language process held by Ms. Howard was that if you chose a particular theme, then everything in the room should reflect this theme, allowing the children to write and read material on that theme. To this end poems, word lists, pictures, etc. were displayed around the room for the children. The children moved through the different learning centres provided by the teacher, working through material associated with the theme.

Ms. Pagett, Rachel's Grade 4 teacher, saw the language curriculum in a different way. The children had assigned texts to work through, and were usually given the opportunity to choose the order in which to work through the material each day. Several times during the year the children were shown films and asked to write about what they had seen. Again, the writing during Year II was mainly assigned. Many of the writing activities were associated with completing a "scribble pattern" to form a picture and then to write about it, writing on a topic chosen by the teacher, or writing letters to a pen pal at another school.

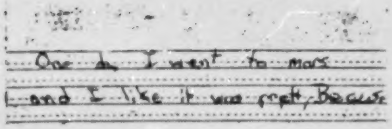
Rachel: Year One

During the first year of the research study Rachel produced 18 pieces of written material. Of these, 12 were narrative and 6 were expository in nature. Only one of her texts was written in cursive writing. The others were all in manuscript. All were assigned stories. The average length of each text was approximately 40 words, ranging from a piece of 9 words to one of 84 words. The total number of words in the 18 texts was 808 with 689 (85.2%) of these using conventional spelling. Only 119 words or 14.7% of the words were invented spellings.

During the observed writing sessions Rachel wrote in short spells watching every so often what other children around her were doing or saying. She made use of the resource material provided by the teacher for the topic, plus on many occasions asked either another child, the teacher aide, teacher or researcher present how to spell a particular word. The majority of her writing was not re-read or revised after it was completed. To Rachel, once the inital draft was completed, that was the end of her writing task.

Several of the pieces written by Rachel were constrained because of the time allowed for each learning centre. As the children moved from centre to centre during the day, approximately twenty minutes was allowed for the work at each centre. The result of this is reflected in her texts, in that following the initial stimulus of the topic, plus thinking about what to write, the time was then almost over. Hence the writing became extremely limited. Rachel started writing the following space story at 11:10 and at 11:20 the time was over.

Figure XI-1 Rachel's Text 4/27/82

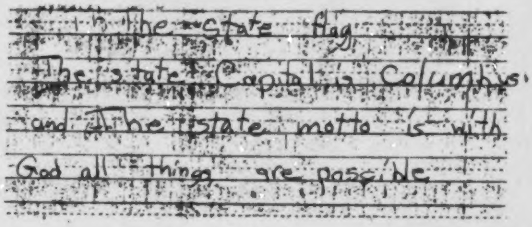


One da I went to mars
and I like it was prety, Becuse

One day I went to Mars . And I like it .

Another constraint on Rachel as a writer was in the topics assigned. Many of these themes or topics were out of Rachel's background knowledge, and her limited understanding showed in her writing. In her report on the state of Ohio, Rachel had great difficulty in just what to write, and so she spent from 10:13 am to 10:31 am using most of the time looking at the resource book and trying to make sense of the assignment. She spent a great deal of time talking to other children in the class. Finally she used the resource book and the data to write the following text. But in her re-reading she had difficulty in reading some of the text she copied from the book. At certain points she was prompted by another student sitting near her.

Figure XI-2 Rachel's Text 1/28/82



The State flag
The state Capital is Columbus.
and The state motto is with
God all things are poscible

The State Flag
The state capital is Columbus
and the state motto is , " With God All Things Are Possible . "

The constraints of the assignment tended to hamper Rachel's writing. Only one story allowed her to use her background knowledge and write from this. This story was about A BOY CALLED.... She chose Mike who was in her class, and wrote about what she knew of him. This was the longest story she produced for the researchers in Year One and only had 9 behaviors noted. It was not until she was nearly through the piece that she stopped for 10 seconds of thinking about what should come next. (Observations while she wrote all her other texts showed that she usually had many interruptions and many pauses to stop and think about what to write next.) The story of A BOY CALLED MIKE showed what Rachel could produce given the opportunity to use her own background knowledge. Of interest is that her percentage of conventional spelling was 81 and her words per T-Unit was 6.69. The piece has a strong sense of story. Finally it was one of the few stories where Rachel did re-read and inserted needed punctuation (periods) in the text.

During the writing sessions of the first year of the study Rachel was able to talk about her writing in many ways. Firstly, the learning centres provided the opportunity for the children to discuss the assignments amongst themselves if they wished, although most of the time, this talk was in the form of a request for assistance in spelling of a particular word. Secondly, Rachel sometimes discussed her finished work with Ms. Howard or the paraprofessional in the room during times when she read her material to them. Finally, Rachel discussed her finished work with the researcher in the reading of the finished product after the writing was completed, and in the bi-monthly interviews.

During these discussion periods it required careful questioning and probing by the researchers to gain an insight into how Rachel felt about her written work and writing in general. Rachel would answer either YES or NO or just shake her head. Still by the end of the second year she would answer most questions with far more detail than what was gained during the early stages of the research.

During the year Rachel indicated that she really did not like writing. She viewed writing from a two-way perspective. The writing completed at school was completely different from the writing she did at home in writing to her sisters. To her, the home writing was not really writing. Writing is only done at school. Rachel also viewed writing as a singular process in which you wrote the piece correctly (especially in terms of handwriting and spelling) the first time. To Rachel, writing had to be correct. That is you did not re-read or revise, and you had to do it "neatly and properly". This view was constantly given throughout the year in answer to the bi-monthly interviews, concepts of writing interviews, and in informal discussions with Rachel at the end of each writing episode.

Rachel's main punctuation problems were reflected in the placement of the period. Many of her sentences ran into two or more sentences. Only in a few instances were commas or quotation marks omitted although Rachel had few opportunities in her texts where commas and quotation marks were obligatory. Rachel did produce some written pieces that used direct speech.

The majority of Rachel's written pieces averaged about 1.25 clauses per T-Unit, averaging 6 words per T-Unit. Many of the written pieces produced during a unit on the state of Arizona were short and contained only a small number of sentences, but with the largest number of words per T-unit of the observed pieces. Of interest is the fact that these research reports on the state also produced large numbers of behaviours per T-unit. In writing these pieces Rachel was required to be involved in a great deal of movement and use of resources.

Rachel's view of who is a good writer stayed the same throughout the two year research in that a good writer was one who wrote neatly and spelled the words correctly. Her emphasis was on the neatness of handwriting as being the most important. During the second year this view reversed itself as the teacher stressed the value and importance of spelling to the class. This idea of neatness being important showed up when she was asked to rank her stories in order starting with the best one. When asked why she chose it as the best Rachel tended to reply that it was the neatest. Part of the interview also asked the child to rank the pieces in the order that they felt the teacher would. Interestingly, in many cases the order changed from the student's view and how the student felt the teacher would view the pieces. The reason given by Rachel for this change was that Ms. Howard would put the longest story first because Rachel thought that the teacher felt that the longer the story, the better the story.

The teacher also was involved in the bi-monthly interviews after the child was interviewed, and completed the task of ranking the stories. The difference between Ms. Howard's ranking and Rachel's ranking for herself and how Rachel felt the teacher would rank them was discussed. The teacher expressed surprise in many instances for the reasons given by Rachel for her decisions. Ms. Howard felt that she had not stressed those reasons, but in reflection realised that certain comments that were made by her could be taken in that particular way by the child. The teacher then noted that she would need to consider carefully what she did say and do.

During the first year Rachel's writing varied considerably depending upon the writing assignment. What was identified was that she had internalised a great deal about the written language. Her sentence structures were appropriate and her conventional spellings never dropped below 70%. The 70% was produced in the story about a circus. In this story was found the greatest percentage of invented spellings of unique words - 33%, in that Rachel set out to write about many things that she had seen, but probably had never used in her written language.

Rachel had written on a great variety of topics within the class language programme during Year 1. During the first year of the study Rachel wrote and published her own book. Ms. Howard encouraged bookmaking producing the bound blank books so that the children could write their finished stories in and then illustrate the pages. The child-authored books that the class produced were well written and all the children took an immense pride in their work. Rachel wrote on the topic of ghosts to go along with the Halloween theme.This activity provided the children with a sense of audience that supported their writing. During the second year of the study Rachel did not publish any books. During one of her bi-monthly interviews however, when asked by the researcher what piece or pieces of written work she had enjoyed, or felt was her best, she mentioned the book she had written the year before.

The various kinds of writing provided Rachel with a good deal of knowledge about writing. Rachel learned that help could be obtained from resource material - books, word lists around the room, dictionaries, etc, plus from talking to other people in the class and asking their assistance when needed. Also Rachel took the time to assist others when requested. Rachel was writing and realising that there were certain conventions, styles and behaviours required in the writing process.

Rachel: Year 2

The change to the middle school saw a different emphasis of instruction and requirements placed on Rachel. The children now worked as a group with everyone undertaking a specific subject together. Emphasis was now on the skills that Ms. Pagett believed were needed by the children in fourth grade.

The type of writing expected from each child also changed. No longer did the children move from learning centre to learning centre working on a theme. The writing experiences were basically decided week by week by the teacher. Writing to pen pals at another school was introduced along with the use of a doodle to colour, make into a picture and then write about.

Also during this year the class teacher allowed the children to choose what they wanted to write about when working with the researcher. Hence several of the stories were unassigned. The children also were advised of their assignments for the day and left to complete them in their own order - just so long as they finished. Rachel, whenever observed by the researcher, put her writing assignment last. Occasionally the researcher asked her to do it first, and she reluctantly agreed to this.

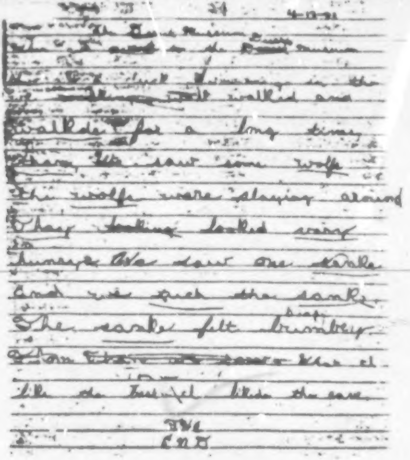
In Year II Rachel worked more in the narrative mode than in any other. Twelve of the 15 stories observed by the researchers were narrative, one was expository and the last two were pen pal letters. Most of the pieces Rachel wrote were in third person. Only a few were in first person. Rachel did less writing during this year than in Year I. Three of the 15 pieces she wrote were related to films that were shown in the class by the teacher. Rachel enjoyed this type of writing, as was shown through her involvement in the writing and in her discussions after she had finished. Also these three pieces were the longest ones produced by Rachel during the year.

The majority of her texts, ten out of fifteen, were in cursive handwriting, which was emphasized by Ms Pagett. Of interest is the fact that of the five texts in manuscript, four of these were her unassigned writing. Rachel enjoyed using manuscript, stating this in the interviews held after the writing was finished and in the bi-monthly interviews. The only letter formation problem Rachel had in Year II was the use of the cursive U which Rachel, on many occasions, joined from the top of the letter rather than from the bottom, producing a V instead of a U.

Rachel's stories for this year ranged from one of 14 words to one of 293 words. Her stories averaged about 35 words in length. Within these stories her conventional spelling ranged from 75% to 100%, with the bulk of the stories being at the 90% mark. This is interesting considering that Rachel's comments in discussions and interviews show that she does not consider herself to be a good speller. The story with 75% of conventional spellings concerned the field trip to the

Arizona-Sonora Desert Museum and provides insights into Rachel's knowledge about spelling.

Figure XI-3 Rachel's Text 4/13/82



The Desert Museum
When we went to the Desert Museum we walked and walked for a long time .
Then , we saw some wolves .
The wolves were playing around .
They looked very hungry .
We saw one snake
and we touched the snake .
The snake felt bumpy .
What I liked the best ? I liked the cave .
The End

This story also was unique in that Rachel invented spellings, crossed out what she felt was incorrect, and then tried again. Normally she did not do this. Also the story was written and then taken to the teacher for her reactions. Ms. Pagett underlined certain words she wanted Rachel to check again, and requested Rachel to add to the piece some indication of what she liked best at the museum. Rachel erased THE END and then added the last sentence. This was the only piece that the researcher saw the teacher and Rachel discuss together. Normally the finished story was placed in the appropriate box for the teacher to read and correct at a later date. In talking to the researcher at the end of the writing episode, Rachel was asked what the field trip was like. Her comment, "we walked a lot and I got tired" is reflected in the piece.

The written piece that gave some better idea of Rachel's writing ability was that of the film, "William Tell". This was a Mr Magoo film, in which he played William Tell and the children really enjoyed the film. Rachel started at once to write and showed that she had remembered most of the film. She set out to retell the story virtually episode by episode, including using direct speech. After writing four pages she was approximately just over half way through the film, Ms. Pagett advised the class they had only 5 minutes to go before recess.

Rachel at this point, stopped, re-read the last page of the story she had written and then finished the remainder of the story in two sentences.

Rachel's bi-monthly interviews of the written pieces she had completed showed a difference in her ordering from that of how she felt Ms. Pagett would rank the stories. Rachel felt that the teacher liked stories that were written neatly and spelled correctly, plus pieces that told about things done by the class (i.e. pen pal letters), rather than her unassigned writings. Also Rachel felt that the longer the story was, the better the teacher would like it. Rachel had identified in these interviews that she liked writing about the films she saw and that she did not really enjoy writing the Pen Pal letters. During one of these interviews Rachel was asked why the story of "William Tell" was so long. She replied, "Because the film was long." But she also noted that it was the best story that she had written. The researcher asked Rachel why it was the best and she stated that it was the longest and she liked writing about films. The story contained a little above the average clauses per T-unit, 1.5, (her average was about 1.3) and it contained the second highest words per T-unit of the stories she had written, 8.16. Her involvement in the story kept her behaviors per T-unit at 3.14 which was about normal for her stories. Most of these behaviors were to stop and think and to re-read.

Rachel produced the only pre-writing activity of drawing during this year. These were the scribble patterns that the students had to complete, colour in, and then write about. Ms. Pagett stated that the class the previous year had enjoyed these and that she then used them again. In Rachel's bi-monthly interview she indicated that she did not really enjoy these assignments and placed them last when rank ordering the pieces.

The piece of writing that stood out from the rest because of its neatness of writing and conventional spelling was that of the retelling of the film, "The Daisy". The observation of this writing episode was taken by the Papago teacher aide. The change in this piece of writing may have occurred because Rachel had a new audience.

Rachel never revised or re-read once she had completed the writing activity during Year II. Once the piece was completed, she took it straight to the teacher's box for correction, or gave it to the researcher to copy. Even when the researcher asked Rachel to read what she had written she read the piece, handed it to the researcher, and made no effort to make any revisions. It became apparent that Rachel just wanted the writing activity over and done with.

As with the first year, the majority of Rachel's punctuation and capital problems were involved with the running of two or more sentences together into one. Of interest is the fact that the words per T-Unit for the stories of both years were about the same. What was evident from the total data was that the stories written in Year One contained more words than the stories in Year Two.

During Rachel's last concepts of writing interview, she identified a boy as a good writer in her class and then stated that he was a good writer because he wrote good stories and also poems. When asked if she wrote poems as well Rachel stated that she did, but that she really did not enjoy writing them because they were hard to write. This was the first time in two years that she had mentioned any other form of writing other than stories. Also she realised that a story and a poem were different. Rachel still thought that she was not a good writer because she could not spell all the words properly. When shown the "William Tell" story she stated that she had not spelled everything right, but she still felt it was her best story.

All through Rachel's interviews she constantly stressed this point of good spelling making a good story. Yet Rachel's spelling averaged out at over 85% correct for all her texts, yet she continued to feel she was not a good writer because she made too many spelling errors.

The two different years made different demands on Rachel. Her development did not move ahead but tended to remain stationary for long periods. What was identified from the second year was that she was a capable language user provided that she was motivated.

The dark-haired girl sat down at the table with the researcher. She picked up the pencil, looked at the researcher who said that this was the last time he would see her as he would soon be returning to Australia. Would she write one final story for him to take back to his Australian school to show his grade four children what an American child can do. She looked at the researcher, thought for awhile and then started to write. The choice of the story was hers. When she finished she put down her pencil, looked at him, and then read her story. The researcher thanked Rachel very much and then she left. The researcher looked at the story and realised that Rachel had moved beyond what she had produced before in that she had invented spellings, used direct speech only for the second time, plus used different forms of punctuation other than periods. Given opportunities to write Rachel could find ways to express her meanings..

Comparison of Data: Years I and II

During the two years that Rachel was observed in the writing process by the researchers what was apparent was that the more the written piece was outside of her background knowledge and understandings, the more use she made of different writing behaviors. The research report she wrote on the state of Ohio had 6.5 behaviours per T-unit, whereas the story she wrote on the Indian legend about the bear had only 0.15 behaviours per T-unit.

Over the two years of the study the major writing behaviour used by Rachel was that of revision which she used 107 times in the first year and 134 times in the second year. The greatest change in use of a writing behaviour was that of stop and think. In the first year Rachel only used it twice, while in the second year she used it 131 times. During the first year Rachel re-read aspects of her stories only ten times, but the second year she increased this behaviour to 40 times. Of interest is that in the first year Rachel used resources on 40 occasions, while in the second year this was reduced to 30 occasions.

The hardest behaviour to ascertain was that of subvocalisation. Without the use of a throat microphone this was extremely hard to identify. Observing Rachel's videotapes, especially those from the latter part of the second year, showed that Rachel was subvocalising through the movement of her lips. The manual observations did not always capture subvocalization while the child was writing; while taking notes, the researcher was limited in what he or she could observe, especially when the child bent over the paper to write. This writing behaviour was only identified seven times on the manual observations forms over the two years.

The video recording of Rachel's involvement in the writing process enabled a better understanding of her composing behaviours to be made. In the first year two video recordings were made, but in the second year nearly all the writing that Rachel produced, plus all interviews (bimonthly and concepts of writing) were recorded on video tape. Replaying of these writing sessions plus the interviews enabled the researcher to double-check the notes and manual observation form data obtained as well as actually looking at what Rachel was doing both in regards to her behaviours and noting any rereading or sub-vocalization, etc. The video, set up to observe each student from the front, allowed for more detail to be gained of the composing process. In reviewing the data gained in the light of the video data, it was noted that Rachel did use sub-vocalisation while writing. The video showed the movement of her mouth as she set out to spell certain words in her work. Also noted was the movement of her head and eyes as she re-read the piece during some of the stop and think behaviours. These had not been observed during the manual observations as Rachel's head being down in order to concentrate on the writing hid many of the behaviours from the researcher. The video provided an excellent backup that allowed for a more detailed analysis of the student's behaviours.

The handwriting used by Rachel, as mentioned earlier in this case study, was both quickly produced and large. In the first year all but one story was in manuscript, with the remaining one being in cursive. When cursive was encouraged by Ms.Pagett Rachel had to be reminded by a class member to write in this form. In the second year the majority of Rachel's writing was cursive. This was a direction from the teacher. Again the main objective seemed to be to complete the work as quickly as possible and this was reflected in the writing Rachel produced.

Rachel could produce neat, well formed writing when she felt the need. The pen pal letters she wrote in the second year identified this. The teacher had stressed that the writing was to be the best, so Rachel took her time and produced some very attractive pieces of work. Every so often she would also write neatly in manuscript providing that there was only a small piece of writing to complete.

Rachel, over the two years of the study, still viewed good writing as that of being both neat and having all words spelled correctly. On many occasions during the interviews she showed that the concept of writing was that of "handwriting" and all questions that the researchers asked were answered from that perspective. To Rachel, the difference between a good and bad writer is that a bad writer "don't get any good stories done". Yet Rachel could not elaborate on just what she meant by a "good story". To Rachel stories were made of words, and the more words in the story, the better it was.

Rachel's stories showed her syntactic development over the two years. The pieces written by Rachel in her first year contained 124 T-Units involving 147 clauses and 457 phrases. The second year material, with three stories less that year one, produced 143 T-Units containing 184 clauses and 542 phrases. In the first year she produced 124 main clauses, 8 adverbial clauses, 12 nominal clauses, and one noun clause. At the end of the second year with three fewer stories, Rachel had used 150 main clauses, 11 adverbial clauses, and 4 nominal clauses.

In year one Rachel had 38 syntactical problems, but only produced 24 in the second year. Year two saw a reduction from 10 to 3 cohesion problems, 11 to 5 syntax problems and 15 to 12 dialect problems.

An analysis of Rachel's stories over the two years produced the data for the following table. It compares the data obtained from Rachel over the four half-years of the study.

Table XI-1 General Statistics: Years I and II

Data Type	Year: 1		Year: 2	
	1st Half	2nd Half	1st Half	2nd Half
No of stories:	9	9	7	8
Running words:	399	409	304	616
Average T/T* ratio:	1.56	1.51	1.66	1.71
Conventional Spelling:	85.46	85.09	91.45	83.60
Invented Spelling:	14.54	14.91	8.55	16.40
% Convent.Punctuation:	40.6	42.5	37.8	43.8
Observed Punctuation:	7.77	9.05	5.59	12.82
Expected Punctuation:	16.54	14.91	14.8	27.6
Omitted Punctuation:	9.52	7.09	9.21	14.94
Inserted Punctuation:	0.75	1.22	0.0	0.16
Substituted Punctuation:	0.0	0.98	0.0	0.49
Letter Form.Problems:	0.25	0.24	0.33	1.14
Capitalization Problems:	14.29	13.69	15.46	5.03
At Beg.of word:	14.29	12.96	15.46	5.03
Elsewhere in word:	0.00	0.73	0.00	0.00
At Beg.Sent.in OR:	1.5	2.93	1.97	1.14
At Beg.Sent.in ER:	6.27	6.36	9.54	3.9

*<T/T ratio refers to Unique words in story (Types) and total number of running words in story (Tokens)>.

The following table summarizes the syntax used in Rachel's written pieces over the two years of the study. It is interesting to note that very little change occured over the two years of the study.

Table XI-2 Syntactic Statistics: Years I and II

Syntactic Data	Year: 1.	Year: 2
Clauses/T-Unit:	1.18	1.28
Phrases/T-Unit:	3.68	3.79
Phrases/Clause:	3.1	2.94
Words/T-Unit:	6.54	6.83
Words/Phrase:	1.77	1.80
Problems/T-Unit:	0.3	0.16
Behaviours/T-Unit:	2.03	2.89
Behaviours/Clause:	1.71	2.25
Behaviours/Phrase:	0.55	0.76
T-Units/100 words:	15.27	14.62
Clauses/100 words:	18.1	18.81
Phrases/100 words:	56.28	55.41
Behaviours/100 words	31.03	42.33
Problems/100 words:	4.67	2.45

N.B. It is interesting to note that Problems/100 words halved in the second year, while the Behaviours/100 words increased by approximately one-third in this second year.

Table XI-3 shows the frequency of words Rachel produces for each text in Years I and II. Tables XI-4 and XI-5 show Rachel's words per T-unit and clauses per T-unit respectively. All the data shows the saltatory nature of the statistics from story to story which is similar for all the subjects in this research.

Table XI-3 Words per Story: Rachel Years I and II

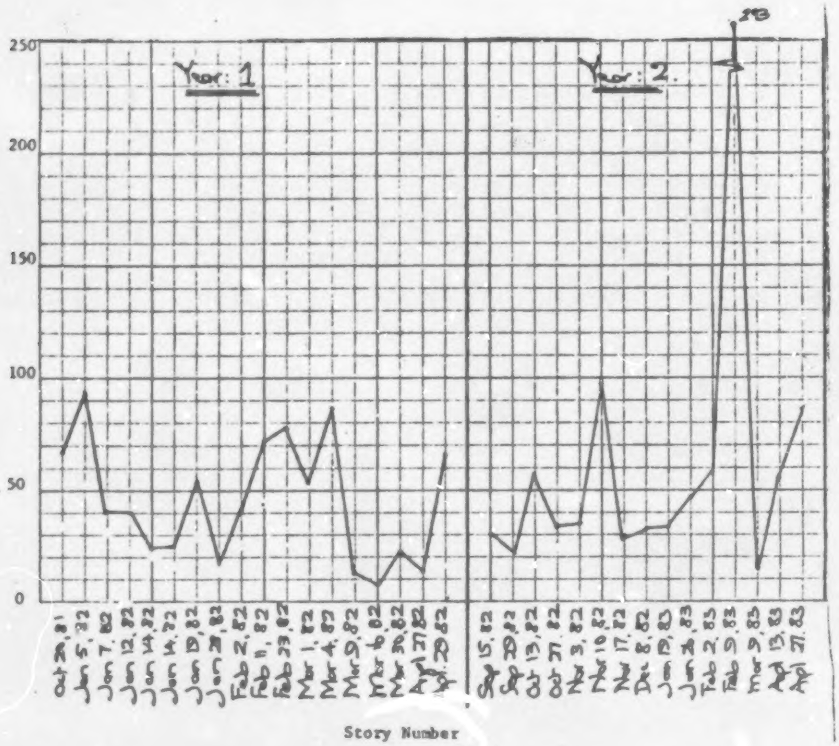


Table XI-4 Words per T-Unit: Rachel Years I and II

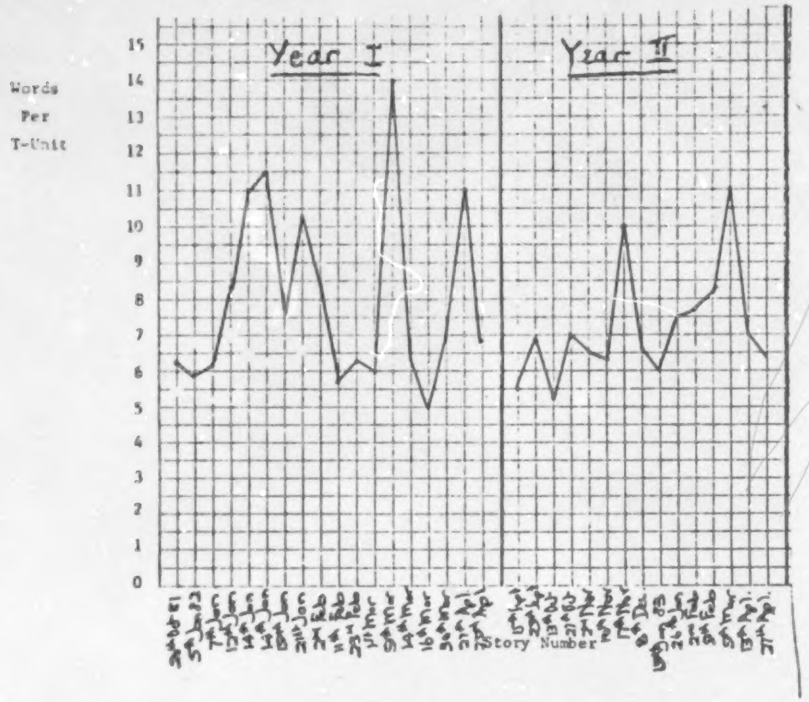
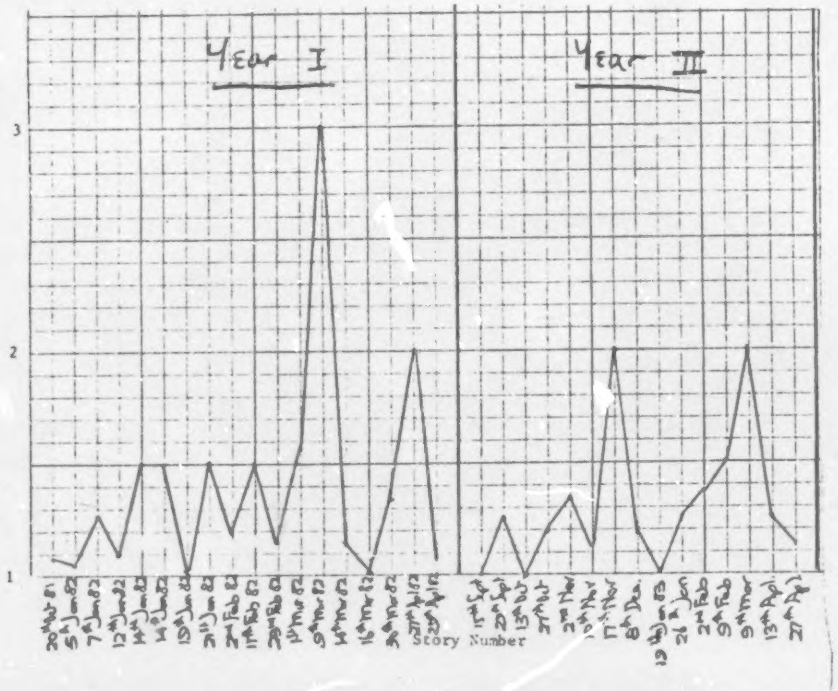


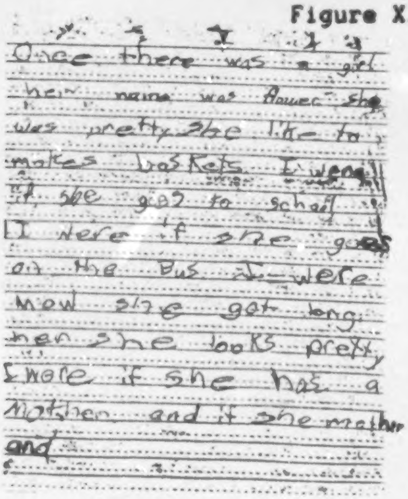
Table XI-5 Clauses per T-Unit: Rachel Years I and II



The Composing Process

Rachel's behaviours while writing give an indication of Rachel as a writer given particular assignments and topics to write about. The story of March 1, 1982 was not completed:

Figure XI-4 Rachel's Text 3/1/82

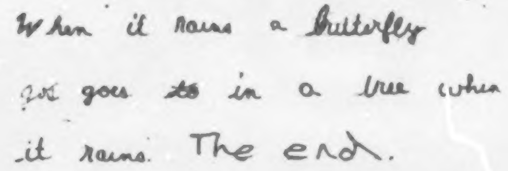


Once there was a girl
her name was flowec she
was pretty she like to
makes baskets I were
if she goes to school
I were if she goes
on the Bus I were
how she got long
hen she looks pretty
I were if she has a
mother and if she mother
and

Once there was a girl .
Her name was Flower .
She was pretty .
She likes to make baskets .
I wonder if she goes to school .
I wonder if she goes on the bus .
I wonder how she got long hair .
She looks pretty .
I wonder if she has a mother .

When Rachel came to GOES in the third line she went to look at the bulletin board and came back and asked the researcher how to spell GOES. She then wrote the S in SCHOOL, watched what the researcher was doing, talked to other girls at the table and then asks the girls at the table how to spell SCHOOL. After writing SCHOOL, Rachel whistled, hit her head with her pencil, changed paper with another girl, and talked with the girls around her about who lives where. Five minutes had now elapsed. Rachel continued to write and wrote WERE for WONDER, telling the researcher that the word is WONDER. When she reached MOTHER at the end of the second to last line, she talked to the girl next to her asking her to guess how many lines she (Rachel) had written. After the conversation Rachel got up to go to the bulletin board to see who had the longest and shortest story displayed. She returned and wrote the last line, stopped, and played a finger game with the child next to her and then pushed her paper away after having a quick look at it.

As can be seen from the above example Rachel did not complete her story and left the end hanging creating a syntactic maze. Year II saw similar writing activity. On the 9th of March, 1983, Rachel was asked to write about a book that had been read to the class, "Where Does The Butterfly Go When It Rains". In this piece of writing she had eight different behaviours (Underneath the text, Rachel draws a picture):



When it rains a butterfly
~~got~~ goes ~~to~~ in a tree when
it rains. The end.

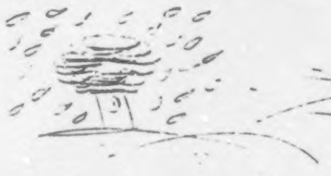


Figure XI-5 Rachel's Text 3/9/83

When it rains a butterfly goes in a tree .
• The End

In writing this piece she stopped to talk to the researcher to ask how old he was, looked at the writing of the girl opposite her, and then spent several minutes on the picture. At the end Rachel pushed the piece aside and walked off to talk to other children in the room. This total session lasted 6 minutes with 90 seconds of it devoted to the actual writing component.

The picture stimulus provided for the story of the 27th October, 1983 for "The Wolf At Night" illustrated this aspect of just putting her thoughts down without considering a sense of story. Rachel just wrote what she saw in the picture. Of interest was that she missed a great deal of detail that was in the picture and concentrated only on the largest items that were easily seen from where she was sitting. Rachel did not bother to get up to go and study the picture in more detail or to discuss it with anyone. The teacher also only made a few passing remarks concerning the writing assignment and what the picture was about. The children were left to draw their own conclusions and ideas from the picture by themselves.

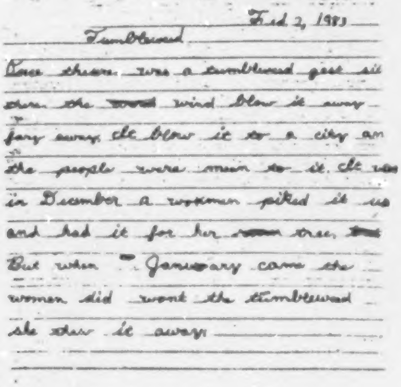
The piece about the scribble pattern on the 19th January, 1983 illustrated the point that Rachel would quickly change in order to complete the writing assignment. The teacher had supplied each child with a scribble pattern on a ditto sheet. The children were to colour in the scribble pattern to form a picture and then write about what they had created. Rachel spent a great deal of time looking at the pattern and then colouring it in. Having completed this she then wrote the heading: "The Barttflay". Rachel had created a butterfly from the pattern. Having written the heading, Rachel looked at it and realised that something was wrong so she went to her dictionary to try to correct the spelling of the heading. After several unsuccessful attempts to locate the word in the dictionary (Rachel went through all the BAR words in the dictionary) she closed the book and crossed out, then erased the heading "BARTTFLAY" and rewrote KITE. The story then became "The Kite". Four sentences later the writing was finished, and not re-read. Rachel then returned to making some final colouring on the picture and placed the finished piece in the teacher's basket. The researcher asked Rachel why did she change the story title, to which Rachel replied, "It was easier to spell kite than butterfly". Rachel was not willing to take a gamble on the invented spelling that she had created, so the original story and all her work in colouring in (it was still a butterfly in the final picture) had been thrown aside

Only a few stories that were observed by the researcher gave an insight into Rachel as an author interested in expressing her meaning through text. As the bulk of the observed stories were assigned by the teacher, the few stories that she wrote using her own imagination and understanding were produced in the second year of the research.

In contrast to the hastily produced pieces described earlier were the pieces she wrote in the second year about the films shown in class. Rachel found it very easy to write about these films and seemed to enjoy these sessions. Perhaps this enjoyment came through having some background knowledge to draw upon, i.e. both a visual and a aural presentation of the film supplying Rachel with the detail she needed. All three films that Rachel saw and wrote about produced an entirely different set of writing behaviours than for the normal assigned classroom writing sessions.

The written piece that Rachel produced on the 2nd February, 1983 on the film, "The Tumbleweed", provides evidence of this changed approach. After viewing the film Rachel commenced writing at 11.03 am. When she had completed the story at 11.21am Rachol had not produced any of the avoidance behaviours from previous sessions. She had seven uses of a resource, in this case checking the spelling of TUMBLEWEED from the chalkboard. Six times she stopped and thought about what to do next (these breaks only amounted to 3 minutes overall); seven times she revised the text, mainly to correct the spelling of or to change a word; and six times she re-read what she had written previously probably to see if what she had written made sense.

Figure XI-6 Rachel's text 2/2/83



Feb 2, 1983
Tumblewed
Once theare was a tumblewad jest sit
there the wind blow it away
fary away. It blow it to a city an
the people were mean to it. It was
in December a woomen piked it up
and had it for her tree,
But when January came the
women did wont the tumblewad
she thew it away.

Tumbleweed
Once there was a tumbleweed just sitting there .
The wind blew it away , far away .
It blew it to a city
and the people were mean to it .
It was in December .
A woman picked it up and had it for her tree .
But when January came the woman didn't want the tumbleweed .
She threw it away .

During this writing session Rachel did not leave the table, or talk to other children. She sat and concentrated on her work and wrote continuously. At the end of the writing session, she handed the piece to the researcher and smiled. After reading the story to the researcher, Rachel was asked how she felt about the session. Rachel commented that she enjoyed the film and liked writing about it.

When Rachel wrote about the film, "William Tell", the same involvement was there. There was no need to push her to write about it, she went straight to the paper and commenced writing. This session saw 119 writing behaviours being used, the bulk of which were to stop and think about her writing. By the end of this writing session Rachel was quite tired. Occasionally at the end she rubbed her eyes and stretched. Still she did not leave the writing to wander around, or to talk to other children. She did ask the children near her on two occasions for the spelling of a word, and on 34 occasions she revised what she had written. Interestingly, she did not re-read the piece when it was completed. The class had been told that they were to finish up in five minutes when Rachel had about completed her third page. She looked at the teacher and the researcher, and then set out to complete the story as quickly as possible. At the conclusion of this writing session Rachel stated that she enjoyed writing about the films. As a side note, in the interview with the parents at the end of the second year, this story of William Tell was shown to Rachel's parents. Rachel's mother felt that Rachel had made a great deal of improvement in her writing and was very impressed with what Rachel had written. She said she was happy with Rachel's writing, although it could be a bit neater because Rachel writes too fast. This last comment by Rachel's mother perhaps reflects a view held generally by most people concerning writing.

When the bimonthly interviews were held during this second year Rachel always chose these written pieces produced from the films as her best pieces for that time period. When asked why, her answer reflected the view made previously in this case study. It was long and her teacher, Rachel felt, liked long pieces of written work. Still Rachel also stated that she liked what she had written in them. Rachel felt the piece on William Tell was the best she had ever written, "because it is the longest". The researcher then asked Rachel what made it such a long story, to which Rachel replied, "The movie was long". The researcher then asked Rachel why she liked writing about the films and she answered, "I don't have to think about it". Further questioning could not get Rachel to elaborate on this comment in much detail, but what did come through during this session was that Rachel found it easier to write about what she had experienced, had seen, had enjoyed.

The follow-up bimonthly interview of the teacher held after all the children in the study had completed their interviews concerning the writing produced, showed that Ms. Pagett was also greatly impressed and surprised by Rachel's story on William Tell. The teacher noted that Rachel had never written a story as long as this one, or as detailed. The teacher was very pleased with Rachel's efforts.

The final free choice piece written by Rachel on 27th April, 1983 for the researcher, reflected the understandings of the writing process that Rachel held, and showed that she could write about other topics besides the films if she was encouraged. Rachel discussed the topic with the researcher first, telling him about a lost cat she knew, and then set out to complete her story. This story, as previously mentioned in this report showed that Rachel could use the conventions of writing: quotation marks, question marks, etc.

From the data obtained it would appear that Rachel's sense of story is closely related to how she sees the writing activity. When she is deeply involved in the activity, ie. the retelling of the films, plus unassigned stories, Rachel produced material that showed her ability to express a meaningful and well-organized story. Where the writing experience was more of a chore, Rachel tended to just put her thoughts down on paper with only limited regards to it making sense over all. Rachel seems to need more sessions to talk about what she will write and her experiences, plus sessions that will help her look at her finished work to help her build pride in her writing and build on her knowledge of written language.

Rachel had and has a lot to offer. It is up to the educational team of the school to develop and assist Rachel; to encourage Rachel to give of herself and use her knowledge and understandings. As Gertrude Buck (1901) advised teachers over eight years ago in regards to involving children in the writing process:

> Let the student only write; the oftener the better. It is by writing that writing is learned. The process itself, if only it be normally conditioned, can work out its own perfection " (p.372).

Rachel needs to be more deeply involved in her work by encouraging her to take charge of some of her learning. She needs to write about things she knows and has experienced, drawing on her background knowledge and interests.

CHAPTER XII THE END

The title of this chapter is in keeping with the observation of children's writing. So many narratives are concluded with these two important words. Yet in no way does anyone expect that THE END refers to the conclusions of an author's writing about a particular subject. In a similar vein as we title this last chapter, we do not want to infer that this is the end of the story of this research. In fact, like narration itself, this chapter is as much a beginning as an end. Any researcher who has collected as many texts, field notes, observations and interviews as we have knows that we have just begun to analyze our data, to share our conclusions and to tell our story. We look forward to the years of further analysis, study of and evolution of more texts on the data we have collected.

It is important to note that EVERYTHING WE KNOW ABOUT WRITING WE HAVE LEARNED FROM KIDS. We are indebted to the theorists and researchers on writing who have helped us to ask the important questions we have tried to answer in this study. However, we can not underestimate the impact on our own knowledge about writing in schools and the writing process which comes from observing and interacting with our subjects. At this point in time we are left with more questions and will continue to seek the answers.

This last chapter presents reflections and ideas we have not yet shared in the body of the report. There is no attempt here to summarize or to conclude. We've made summaries at various points in our narrative. Basically we will present in this chapter some ideas about the implications of our study for the classroom and for further research.

The Social Context for Writing

In this study we focused on writing in the classroom, the social context in which writing in school takes place. We were fortunate to have had the opportunity to spend the two years in the classrooms that we did. We chose to work in a small school district because of the population of children that we would be involved with. We're grateful to the teachers who were willing to allow outsiders to spend a year on a regular basis in their classrooms. Although, we were not always in agreement with the kinds of writing instruction which we saw, we appreciated finding teachers who believed that writing was important and agreed to have their children write regularly so that we could observe the development of their writing.

Chapter V indicates the importance of the social community in the evolution of text. We believe that the social context for writing is significant even when a writer is writing alone. Through this study we have begun to appreciate the dynamic interactions of students, paraprofessionals, teachers and reasearchers on the evolution of text. These dynamic interactions have an important impact on the ways writers view themselves as writers as well as on what they create.

One aspect of writing instruction which we would like to see encouraged is greater collaboration and cooperation in writing among teachers and students and among the students themselves. Vygotsky (1981) talks about the Zone of Proximal Development, Bruner (1978) and Cazden (1983) discuss scaffolding and Halliday (1980) calls it tracking. In all cases these terms relate to the support others can be in the development of the learner. We believe that our study has strongly demonstrated that as writers cooperate, listen, offer suggestions, and give advise to others during writing that their own writing shows greater complexity in form at the same time as it shows greater concern for meaning. The significant adults in the school community must also become aware of their own impacts on the language learning of students. Assignments, comments, degree of significance placed on a product all leave their mark on the seriousness with which young authors assume responsibility for their own writing. As researchers we were often amazed at how interested the children were in the field notes and manual observations we were making on their writing. They helped us, corrected us, reminded us and their writing often reflected the importance that they believed we held for their work. They were so right.

The social organization of a writing community--a literacy community because reading and other symbolic representations must be involved as well--needs to be the focus of both preservice and inservice education. Teachers play a major role in creating the social context in which a literacy community develops. Teachers must be helped to realize how exciting learning becomes as children are encouraged to assume owndership of their own learning--their own writing--their own reading.

Revision and the Nature of Error

In the classroom settings in which we were involved we did not see the kind of editing processes through teacher-student conferences which are so strongly advocated by Graves (1982) and Calkins (1983). We would support the conclusions that they come to about the importance of students being involved in their own monitoring and editing. Teacher education programs need to be organized to help preservice and inservice teachers understand the dynamic nature of self-monitoring and self-editing.

In our previous research on the reading process (Goodman and Burke, 1968, 1973, Goodman and Goodman, 1978), the notion of the confirmation processes in reading has been well established. We concluded that readers were constantly questioning themselves about the degree to which their reading was sounding like language and making sense. The writing research we are now reporting certainly supports the notion that writers are confirming as they are writing. We believe our subjects were monitoring their writing wondering whether their writing was making sense, whether it would read like written language. These conclusions are supported by our detailed recordings of the errors or miscues, the revisions, the rereadings and the concerns the students had about their writing.

Teachers must be helped to understand the significance of writers being in control of their own expression of meaning through written language. They need to know that the errors children generate are not only a necessary part of writing but actually are part of the dynamic developmental process that allows meaning to grow and be expressed in varied and complex ways. Theorists in behavioral psychology have for too long disseminated the notion that if the teacher does not immediately correct and reinforce the correct form in their students the result will have long range negative impact on children. This must be shown to be an outmoded notion not supported by current research in writing.

Error is a necessary and intrinsic part of development. We must understand the dynamic part that error plays in development. We must help teachers understand the cultural views and assumptions they have about error, and help teachers to use their knowledge about error to trust that self monitoring and self correcting are intregral to all language learning. To build on this knowledge and learning, it is necessary to focus more research on the nature of error and its role in language learning as well as on teacher response to error and its relationship to development. We need to find many ways of helping teachers understand this phenomenon through observation techniques built into preservice and inservice programs. Kidwatching (Goodman, 1980) techniques are a beginning in this direction.

We need to build strong teacher education programs in which teachers and children interact about their writing through both spontaneous and officially organized conferences. We need greater information about the nature of rereading and revision and its influence on the evolution of texts written by children. We need to help teachers know what kinds of questions encourage children in their expression of self through writing and what kinds of questions and statements may actually inhibit children's writing in the classroom setting.

Teachers who know how to observe children, know the significance of the nature of error, organize the kind of environment in which children are willing to take control of their learning, willing to take risks in writing and willing to learn how to mean through written language.

Fundamental Assumptions for a Writing Curriculum

At the present time we would like to suggest the following assumptions as fundamental to building a sound curriculum in writing. These assumptions are strongly influenced by our research conclusions and by Halliday's (1980) notions that children learn language, learn through language and learn about language by USING language for functional and purposeful means. And this is as true for written language as it is for oral.

Children learn to write by writing.

Children learn to write in a social environment that encourages writing.

Children learn to write as they know their audiences and use writing for purposes of communication.

Children learn to write as they express themselves through many varieties, modes and forms of writing.

Children learn to write as they read a variety of different kinds of reading materials.

Children learn to write as they make personal choices and decisions about what to write.

Children learn to write as they experiment, take risks and invent new forms of writing as they try to express their meanings through writing.

Children learn to write and learn about writing as they make errors or miscues and self-monitor their own writing.

Children learn about written language as they use written language.

Children learn to write as they want to tell others about exciting learnings in social studies, science, math or other areas of the curriculum.

Teachers play a significant role in helping children learn to write.

Interrelations Between Researchers and School Personnel

Our research story not only is concerned with children and how they learn to write but it also reveals a good deal about how researchers and the members of the school community interact to learn more about human writing development. Over the two years we have spent in three classrooms and two different schools on a regular basis we have learned a good deal about the significance of a strong and supportive relationship existing among the many people involved in classroom research.

In classroom research everyone must be involved and know the purposes for the research. This research was actually suggested by one of the professionals in the school district. The principal of one of the schools we worked in was involved in the planning of the research proposal, made suggestions and raised concerns throughout the whole project from the writing of the proposal through the final report writing.

The agenda for the research must be carefully presented to all those involved. We presented our objectives to the school board, to the administrators of the school district and in each school that we worked and to the teachers and paraprofessionals with whom we would be involved most closly. We were honest about what we would be observing and what our research questions were. We made ourselves available on a regular basis to school personnel. We set up interviews with the parents of our subjects once a year. This provided opportunity for them to be able to question us as well as enable us to gain greater insight into our subjects.

We interacted with our subjects and answered all their questions honestly. The open nature of our relationship allowed us to learn much more about them and their views of writing. We became aware of how important students believed their writing must be because researchers were interested in studying them. This, in and of itself, had an impact on the kind and amount of writing the subjects did for us.

There were some aspects of communication that we would have liked to have but didn't for a variety of reasons.

We were not in the school as often as we had hoped because of distance and we did not have time to serve the teachers in answering their questions about writing instruction. More interaction about what we were learning would have no doubt been important to the teachers and had a greater impact on curriculum. Although we took care of the more formal interviews and the more serious concerns of teachers and adminstrators, we were seldom in a setting to have informal extended periods of time to get together and share general impressions, concerns and feelings.

We had hoped to give the teachers and the children ongoing information about the results of the study as we were analyzing data. Unfortunately our data analysis could not keep pace with the data collection. We tried to analyze the data during the data collection period but for the most part we analyzed data over the summers often after the children had moved to another classroom. If possible it would be important to build into classroom research opportunities for continuous analysis of data so that teachers and children can get quicker turn around time on the data analysis.

Our research story has been a long and complicated one. There has been a development of characters, an extensive plot, a long chronology of events, many climaxes, problems and successes. And so we've come to THE END of the beginning of our multiple narrative on this research.

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Appendix IIIA: Manual Observation Form - Earliest Version

Coding Scheme:

Each word & punctuation mark numbered
Circled number indicates explanation in observer's text

/// = erasure
T = teacher involvement
IS = Interruption solicited
US = Interruption unsolicited

RR = rereading
PR = proofreading
DR = work on drawing
R = resource use
SV = subvocalizing

ST = stop & think

Subject ____________________
Researcher ____________________
Date ____________________ Pg. ______
Context ____________________

Subject's Text	Time: Code:	Observer's Text

Appendix IIIB: Interview Questions

Composing

1) Who's a good writer that you know? Why?

2) What does a good writer need to do/know to write well?

3) How can you tell when somebody's a bad writer?

* 4) What does a good writer need to know to write well?

* 5) Do you read what you write while you are writing? Ever? When?

* 6) How do you decide that what you wrote is good?

* 7) When do you know that what you write is good?

* 8) When you decide to write what's the first thing you do? What do you do next? When you want to end your writing what do you do?

Handwriting

1) Can you find your own writing if you don't put your name on it? What about your handwriting makes it just yours?

2) Who has the best handwriting? Why?

* 3) When you pick up a pencil or pen and write on paper what do you need to know about handwriting?

* 4) When you write on paper what do you do so that other people can read your writing?

* 5) What kinds of paper do you like to write on best?

* 6) What do you like to write with best?

Spelling

1) When you are writing something what do you do when you are not sure about how to spell it?

2) Is spelling important? And why?

* 3) How do you know something is spelled right?

* 4) Who's the best speller you know? What makes him a good speller? Do they ever make a spelling mistake?

Appendix IIIB

Audience

1) Who will read your paper?

2) Let's pretend you are going to write two letters, one to President Reagan and one to your best friend. What would those letters be like?

* 3) If somebody you didn't know read your story what would they think about it?

* 4) What would your teacher like best in your paper?

* 5) What would your "parent" like best in your paper?

Sense of Writing (Semantics - Meaning)

* 1) What kinds of things do people write?

* 2) How do you know somethings a ___________? Use list given in #1

3) If I handed you some writing how would you know if it was a story or something else?

*Optional

Appendix IIIB

STUDENT MONTHLY INTERVIEW

I. Student Perspective on Observed Writing

1. Here are the pieces we watched you write. Will you put them in order for me starting with what you think is your best piece, then your second best, then your third best, and all the way down to the piece you like the least.

2. Why did you choose this as your best piece? What makes it your best piece?

3. Why did you choose this piece as your least best? What makes it your least best piece?

II. Teacher Perspective on Observed Writing

1. Take your writing and put in in order again from best to least best BUT this time, do it the way you think Miss Henn would do it. Which one of your pieces would she like the best; which one would she like the least?

2. Why do you think Miss Henn would like this piece the best?

3. Why do you think she would like this piece the least?

III. Unobserved Writing

1. (Take folder of unobserved writing) Which piece do you think is especially good? Why? What makes it so good?

2. Which piece don't you like: Why? What makes it not so good?

Appendix IIIE

WRITING CONCEPTS INTERVIEW

Questions on Punctuation

Take copy of subject's writing that has punctuation marks in it to the interview.

1. When you write, what kinds of marks besides letters do you use on the paper? (If they can't answer this, point out or write a period and ask if they use those in writing.)

2. Ask the child to write all the marks other than letters that they know. As they write them, have them tell you the name of each and when or how it's used. (Ask them to write even ones they don't know the name or use of.) Have them illustrate with examples from their own writing.

3. A, b, and c are all called letters; do you know a name for all of these? Point to marks they've written or marks in their paper. (If no, have you ever heard of punctuation marks?)

4. Why do people use punctuation when they write?

5. How did you figure out how to use punctuation?

SJW/ngs 3/28/83

Appendix IIIB

PARENT QUESTIONAIRE

Name of Student ______________________ Date of Birth ______________________

Sex __________ Grade __________

Father	**Mother**
Name	Name
Birthplace	Birthplace
Occupation	Occupation
Education	Education

Siblings: (number, ages.) ____

____

Languages spoken at home: ____

In order to get to know your child better, what things can you tell us that makes your child special? (include talents, abilities, hobbies, etc.)

ADULT/CHILD INTERACTIONS

1. How often, how early, and by whom was your child read to?

2. Has there been any storytelling to the children in your home? Any storytelling by the children?

READING/WRITING ACTIVITIES AT HOME

1. Who reads in the home...where, when, how often and how much?

5

2. How and when did your child first react to print? (labels, cereal boxes road signs, his name, etc.)

3. What kinds of writing takes place in the home? (shared family letters, greeting cards, pen pals, grocery lists, etc.)

ACCESS TO MATERIALS

1. What materials are available for reading and writing in the home? (books owned by family ,books owned by child, magazine subscriptions to the family or to the child, newspapers, etc.)

2. How does your child use a library? (frequency of visits, attitudes, etc.)

COMMUNICATION

1. Describe the communication between you and your child's school and teacher. (frequency, atmosphere, comfort, attitude, etc.)

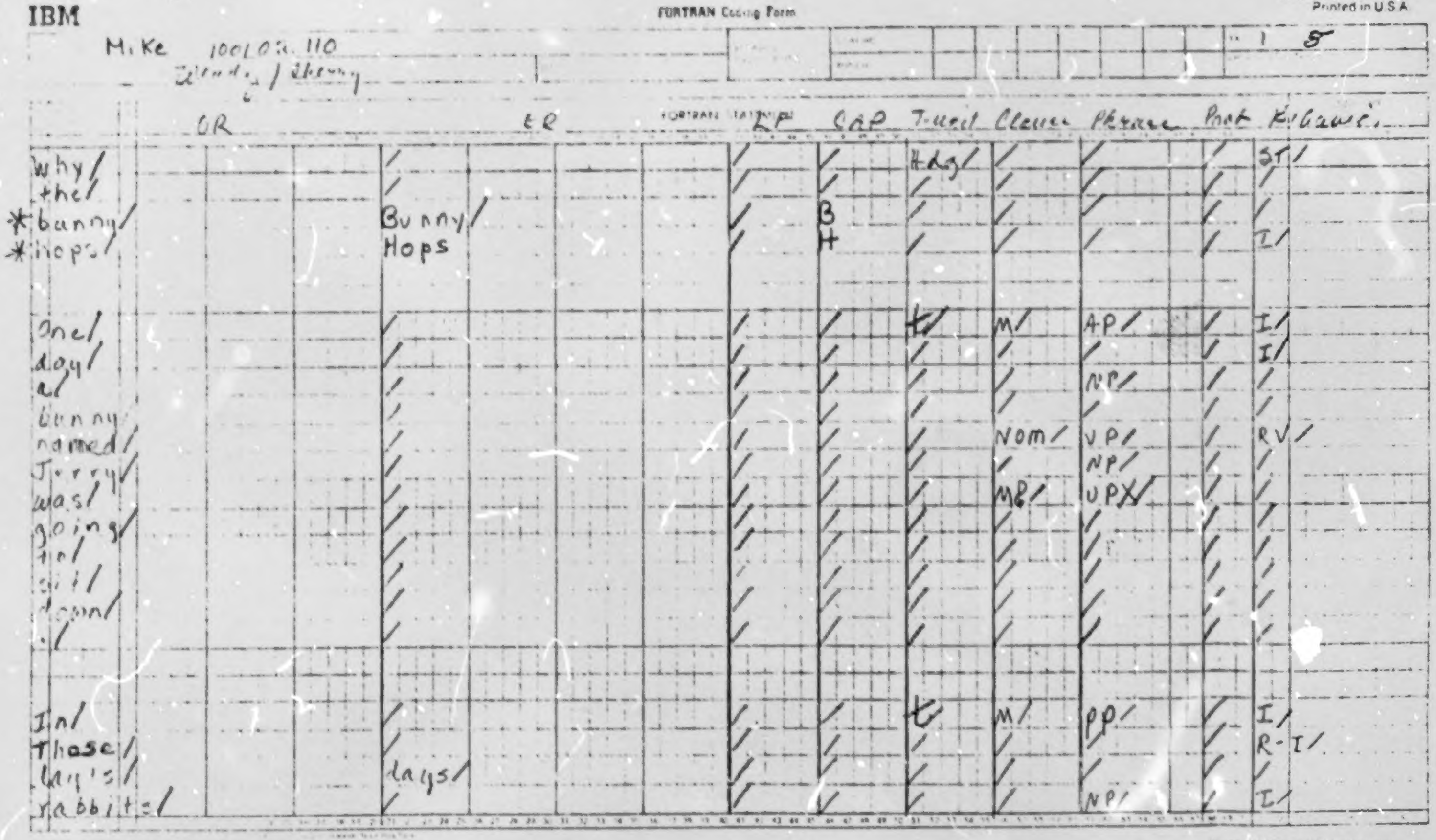
2. What do you hope schooling can do for your child?

Appendix IVA Data Analysis Check off Sheet

WP 81

Subject ____________________

Story Number	Fortran Coding	Fortran Double-Check	Computer Entry And Print Out	Computer Sheet Checked	Edited For Computer	



IBM FORTRAN Coding Form

GX28-7327-6 U/M 050**
Printed in U.S.A.

Mike 100L03.110
[illegible] / [illegible]

1 5

	OR	ER	LP	CAP	T-unit	Clause	Phrase	Post	[illegible]
why/		/	/	/	Hdg/	/	/	/	ST/
the/		/	/	/	/	/	/	/	/
*bunny/		Bunny/	/	B	/	/	/	/	/
*hops/		Hops	/	H	/	/	/	/	I/
one/		/	/	/	t/	M/	AP/	/	I/
day/		/	/	/	/	/	/	/	I/
a/		/	/	/	/	/	NP/	/	/
bunny		/	/	/	/	/	/	/	/
named/		/	/	/	/	Nom/	VP/	/	RV/
Jerry/		/	/	/	/	/	NP/	/	/
was/		/	/	/	/	MB/	VPX/	/	/
going/		/	/	/	/	/	/	/	/
to/		/	/	/	/	/	/	/	/
sit/		/	/	/	/	/	/	/	/
down/		/	/	/	/	/	/	/	/
./		/	/	/	/	/	/	/	/
In/		/	/	/	t	M/	PP/	/	I/
Those/		/	/	/	/	/	/	/	R- I/
day's/		days/	/	/	/	/	/	/	/
rabbit=/		/	/	/	/	/	NP/	/	I/

IBM MCAFEE/A11

FORTRAN Coding Form

GX28-7327-6 U/M 050**
Printed in U.S.A.

Mike 100/02.110
Wendy / Ahary

PAGE 2 OF 5

	OR	ER	L	Cap	T-unit	Clause	Phrase	Part		Behavior
didn't		/	/	/	/	/	VP/	/	/	
nop		/	/	/	/	/	/	/	RV	-I/
.		/	/	/	/	/	/	/	/	
Jerry		/	/	/	t	m/	np/	/	/	
sat		/	/	/	/	/	vp/	/	/	
down		/	/	/	/	/	/	/	/	
on		/	/	/	/	/	pp/	/	/	
the		/	/	/	/	/	/	/	/	
grass		/	/	/	/	/	/	/	/	
.		/	/	/	/	/	/	/	ST	-T/
But		/	/	/	/	/	/	/	/	
Jerry		/	/	/	t	m/	-/	/	/	
didn't		/	/	/	/	/	np/	/	/	
no		know/	/	/	/	/	vp/	/	V/	
that		/	/	/	/	/	/	/	RV	-I/
there		/	/	/	/	NOM/	OTH/	/	/	
was		/	/	/	/	/	NP/	/	/	
a		/	/	/	/	/	VP/	/	/	
sticker		/	/	/	/	/	NP/	/	/	
in		/	/	/	/	/	PP/	/	/	

**Number of forms per pad may vary slightly

2

Appendix IVB

BEST COPY AVAILABLE

Appendix IVB

```
MCAFE1/A11
Why////hdg////st/
the/////////
*bunny/Bunny//d//////
*hops/Hops//H/////i/
One////t/m/ap//i/
day/////////i/
a//////np///
bunny/////////
named/////nom/vp//rv/
Jerry//////np//
was/////m&/vpx///
going/////////
to/////////
sit/////////
down/////////
.//////////
In////t/m/pp//i/
those////////r i/
day's/days////////
rabbits//////np//i/
didn't///////vp///
hop////////rv i/
.//////////
Jerry////t/a/np///
sat//////vp///
down/////////
on//////pp///
tne/////////
grass/////////st t/
.//////////
But////t/m/-///
Jerry//////np///
didn't//////vp//rv/
ho/Know///////rv i/
that////nom/oth///
there//////np///
was//////vp///
a//////np///
sticker/////////
in//////pp///
the/////////
grass/////////
.//////////
Then////t/m/oth///
Jerry//////np///
sat//////vp///
down////////st i/
.//////////
Jerry////t/cj/np///
jumped//////vp//st/
up/////////
in//////pp///
the/////////
air////////i/
```

```
O/,////////
then////cj/oth/x//
started//////vpx///
jumping/////////i/
in//////pp///
the/////////
air/////////rv i/
.//////////
Then////t/m/oth///
a//////np///
tiger/////////i/
tried//////vp//i/
to////nom/vp///
get/////////
Jerry//////np///
but////t/m/-///
Jerry//////np//t/
hoped/hopped/////vpx///
fast/////////
and////t/m/+///
the//////np///
tiger/////////
got//////vpx///
tired/////////
.//////////
The////t/m/npm//i/
other/////////
rabbits/////////
watched//////vp//i/
.//////////
*they/They//T/t/m/np///
tried//////vp///
it//////np///
and////t/m/+///
that/that's/////npvp/d//
why////nom/oth///
rabbits//////np///
hop//////vp///
.//////////
the////hdo/////
end/////////
```

Appendix IVB

```
   INPUT FILE FOR MCAFE1/A1:
OBSERVED      EXPECTED   LF  CAP TUNIT CLAUSE     PHRASE    PROB       BEHAV
Why                              hdg                                    st
the
*bunny        Bunny          B
*hops         Hops           H                                          i
One                               t     m          ap                   i
day                                                                     i
a                                                  np
bunny
named                                   nom        vp                   rv
Jerry                                              np
Was                                     m&         vpx
going
to
sit
down
.
In                                t     m          pp                   T
those                                                                   r  i
day's         days
rabbits                                            np                   i
didn't                                             vp
hop                                                                     rv  i
.
Jerry                             t     m          np
sat                                                vp
down
on                                                 pp
the
grass                                                                   st t
.
But                               t     m          -
Jerry                                              np
didn't                                             vp                   rv
no            know                                                      rv  i
that                                    nom        oth
there                                              np
was                                                vp
a                                                  np
sticker
in                                                 pp
the
grass
.
Then                              t     m          oth
Jerry                                              np
sat                                                vp
down                                                                    st  i
.
jerry                             t     cj         np
jumped                                             vp                   st
up
in                                                 pp
the
```

4

Appendix IVB

air							i
0	,						
then				cj	oth	x	
started					vpx		
jumping							i
in					pp		
the							
air							rv i
.							
Then			t	m	oth		
a					np		
tiger							i
tried					vp		
to				nom	vp		
get							
Jerry					np		
but			t	m	-		
Jerry					np		t
hoped	hopped				vpx		
fast							
and			t	m	+		
the					np		
tiger							
got					vpx		
tired							
.							
The			t	m	npm		i
other							
rabbits							
watched					vp		i
.							
*they	They	T	t	m	np		
tried					vp		
it					np		
and			t	m	+		
that	that's				npvp	d	
why				nom	oth		
rabbits					np		
hop					vp		
.							
the			hdg				
end							

Appendix IVB

OBSERVED RESPONSE TEXT - MCAFE1/A11

Why tne bunny hops
One day a bunny named Jerry was going to sit down .
In those day's rabbits didn't hop .
Jerry sat down on the grass .
But Jerry didn't no that there was a sticker in the grass .
Then Jerry sat down .
Jerry jumped up in the air then started jumping in the air .
Then a tiger tried to get Jerry
but Jerry hoped fast
and the tiger got tired .
The other rabbits watched .
they tried it
and that why rabbits hop .
the end

EXPECTED RESPONSE TEXT - MCAFE1/A11

Why the Bunny Hops
One day a bunny named Jerry was going to sit down .
In those days rabbits didn't hop .
Jerry sat down on the grass .
But Jerry didn't know that there was a sticker in the grass .
Then Jerry sat down .
Jerry jumped up in the air , then started jumping in the air .
Then a tiger tried to get Jerry
but Jerry hopped fast
and the tiger got tired .
The other rabbits watched .
They tried it
and that's why rabbits hop .
the end

Appendix IVB

```
 SPELLING DATA FOR MCAFE1/A11
**************

 WORDS          FREQ  CONV  INV   INVENTED SPELLINGS
----------------------------------------------------
a                 3     3    0
air               2     2    0
and               2     2    0
bunny             2     2    0
but               2     2    0
day               1     1    0
days              1     0    1    day's(MCAFE1/A11)
didn't            2     2    0
down              3     3    0
end               1     1    0
fast              1     1    0
get               1     1    0
going             1     1    0
got               1     1    0
grass             2     2    0
hop               2     2    0
hopped            1     0    1    hoped(MCAFE1/A11)
hops              1     1    0
in                4     4    0
it                1     1    0
Jerry             7     7    0
jumped            1     1    0
jumping           1     1    0
know              1     0    1    no(MCAFE1/A11)
named             1     1    0
on                1     1    0
one               1     1    0
other             1     1    0
rabbits           3     3    0
sat               2     2    0
sit               1     1    0
started           1     1    0
sticker           1     1    0
that              1     1    0
that's            1     0    1    that(MCAFE1/A11)
the               8     8    0
then              3     3    0
there             1     1    0
they              1     1    0
those             1     1    0
tiger             2     2    0
tired             1     1    0
to                2     2    0
tried             2     2    0
up                1     1    0
was               2     2    0
watched           1     1    0
why               2     2    0

 TOTAL UNIQUE WORDS (TYPES) = 48
```

Appendix IVB

```
TOTAL RUNNING WORDS (TOKENS) = 85
TOKEN / TYPE RATIO = 1.77%
TOTAL CONVENTIONAL SPELLINGS = 81
TOTAL INVENTED SPELLINGS = 4
% OF INVENTED SPELLINGS = 4%
% OF INVENTED SPELLINGS
     BASED ON UNIQUE WORDS = 8%

PUNCTUATION DATA FOR MCAFE1/A11
******************

count of observed punctuation for MCAFE1/A11
----------------------------------
  . = 9
TOTAL EXPECTED = 10
TOTAL OBSERVED = 9


count of omitted punctuation for MCAFE1/A11
-----------------------------
  , = 1
TOTAL OMITTED = 1


count of inserted punctuation for MCAFE1/A11
------------------------------
TOTAL INSERTED = 0

count of substituted punctuation (OR / ER) for MCAFE1/A11
----------------------------------
TOTAL SUBSTITUTED = 0


LETTER FORMATION DATA FOR MCAFE1/A11
************************


TOTAL LETTER FORMATION PROBLEMS = 0

CAPITAL DATA FOR MCAFE1/A11
*************

  H = 1
  T = 1
  B = 1

TOTAL CAPITAL PROBLEMS = 3
TOTAL AT START OF WORD = 3
TOTAL AT OTHER LOCATIONS = 0
TOTAL IN HEADINGS = 2
TOTAL AT BEG OF SENT IN OR = 1
TOTAL AT BEG OF SENT IN ER = 1
% AT BEG OF SENT IN OR = 33%
% AT BEG OF SENT IN ER = 33%
```

Appendix IVC
List of Invented Spellings
with Different Initial Letters

Expected	Observed
after	ftre
alive	uloveug
almost	olmost
	omas
	omest
	omen
also	ourrd
always	ousc
anymore	ne mor
arm	rum
arms	roms
around	ranoud
at	ta
ate	eat (8 times)
auntie's	entesc
away	uon wasaey
breakfast	dilftsct
bring	pring
broken	dranc
brought	drank
bucked	dacket
came	kimenm
carnival	sriaio
celebrated	slodrat
	send
chasing	shaeing
combed	kom
	komed (2 times)
crazy	kursa
dead	bad
donuts	bonets
drawing	rawing
early	rleea
earthquakes	raecrs
end	and
engine	ingan
escaped	asdta
ever	gare
everybody	over body
	aver, booy
	arey botae
everyone	very one

Expected	Observed
everything	averything
except	sapye
	akspe
go	og
got	ror
home	soonme
how	who
ink	enk
is	si
it	ti (7 times)
just	gest (gest)
killed	cet
	cat
Kitt Peak	uetpet
knew	new
	now
knife	nife (10 times)
knife's	nifes
know	no (6 times)
	now (3 times)
	nowy
man	mn
	bmen
newspaper	arnd
no	know
nobody	know body
now	know (3 times)
of	fo (7 times)
off	fo
on	no (2 times)
only	alle
or	a
other ones	ateraones

Appendix IVC
(continued)

Expected	Observed
other	auth
	arth
	notha
our	are (9 times)
	ary
ours	ares
over	eovst
quickly	kuel
real	will
seatbelt	cebclebat
stayed	theay
to	ot
turning	crnen
unconscious	on counts
upon	opon
us	as (4 times)
used to be	youstbe
waves	yourses
who	ho (6 times)
	how (2 times)
whole	hole (5 times)
with	akert
	unth
wrong	rond
	rowng
Yetta	uata
yipee	wiples
YMCA	wmca
your	or

6

2

Appendix IVD: Procedures for Computer Coding of Categories
(From Researchers Coding Notebook)

PROCEDURES FOR COMPUTER CODING
FOR PAPAGO WRITING PROJECT

USE OF FORTRAN CODING SHEET

Field	Data
1-20	OR (Observed Response)
21-40	ER (Expected Response)
41-45	Letter Formation
46-50	Capitals
51-55	T-Unit
56-60	Clause
61-67	Phrase
68-70	Problems
71-80	Behaviors

Coding Selection

Code any piece that has at least one T-unit; do not code if piece consists of headings only. Do not code second draft. Try not to pick up teacher editing.

Procedure

Use double-spacing or leave a few spaces after each sentence.
Do each column vertically (i.e., for the whole story). In each OR, code the last written revision. Include each linguistic item (word or punctuation) for the whole story, even sections not observed by researcher.

At top of sheet

Filename (in "Program" space) = 3 letters for child's name, two letters for month (see separate sheet--filename for computer coding--for abbreviations), 1 or 2 for year, slash, A for first story of day, two digits for day of month

Example: GABN01/A17 (Gabriel's first story on November 17, first year of project)

Researcher/Coder

ER + OR

Code from the child's original. Then, use MOF, audio and video for verification.

1. Either OR or ER may be more than one word if necessary to show writer's intention.

(Examples: OR = ever body, ER = everybody
OR = rolcraer ER= roller coaster

2. Names are coded as one syntactic unit (e.g., NP) but placed on more than one line if more than one word.

3. When the OR or ER is an omission, use a null in appropriate column. Precede with asterisk.

4. Use * before OR to avoid counting items as invented spelling. (When ER and OR don't match and spelling is not involved e.g., omission or insertion in OR or ER; capitalization only; some dialect forms "is" for "are", "a" for "an"; reversed word order.) Never use a * on a line where there is punctuation. Do not use * in a case where conventional spelling reflects all dialects (stop/stopped, book/books).

5. Use of "nonword," O, and maze (z1, etc.)

a. Use "nonword": if ER can't be determined for a single word, but syntax isn't otherwise disrupted; e.g., "Akay likes the State Flag." "Akay" has "nonword" in ER, np in Phrase column, nothing in Problem column. Don't use asterisk.

b. Use O: for extra words inserted within a T-unit, when intention is clear (simple syntax error). E.G., "I went went to sleep." One "went" has * on OR, "O" in ER, slashes in remaining columns, s in Problem column.

c. Use maze in two cases:

1. Incomplete t-unit (often at end of story)
I was going because I
z1 z2

2. Insertions where intention isn't clear:
So the and the people went home.
z1 z2
Treat invented spelling within maze like any other invented spelling. Don't put anything in Problem column.

6. For an obligatory, underlining, use an equal sign on the preceding line (as if it were a punctuation mark).

7. For usages like O.K., TV, etc., - child's version is acceptable in all reasonable cases (O.K., OK, o.k., ok are all acceptable; o.K isn't).

LETTER FORMATION + CAPITALS

1. The letter(s) entered in the LF and CAP columns should be the ER in both cases.
2. The OR entry for letter formation problems should reflect the child's intention (uncrossed t should be crossed, reversals corrected, etc.)
3. The only reversals in the LF column should be those at the letter level. Reversals within word will be treated as invented spelling.
4. If two different letters are coded leave space between them.
5. If letter formation problem is related to cursive follow letter with *. Do not leave a space.

T-UNIT (Based on Hunt's definition)

t	T-Units
d	Dialogue (Mark d at beginning of dialogue and/or dialogue carrier. Mark d& at any new T-unit within a dialogue. If a new character initiates dialogue, mark d. Use multiple codes such as d q (with a space between) if necessary where T-unit starts. Never break a dialogue with its dialogue carrier as 2 T-units.)
hdg	Heading (all formal openings and closings mark once for each heading - headings are not coded at the clause and phrase level)
imp	Imperative
q	Interrogative
z	Maze See #5c in ER and OR section for when and how to use. Number each word within a maze z1, z2, etc. Put slashes in remaining columns).
!	Interjection

Appendix IVD

CLAUSE (indicated by number of main verbs; i.e., every verb
------ is a new clause. Exception - simple compound verbs.)

m	Main Clauses An independent clause, or anything that stands by itself, including many idioms, terms of address, negative and positive responses. A dialogue carrier is a main clause, and the following dialogue is treated like any other clause, including a main clause.
cj	Conjoined (not a simple compound verb - mark at beginning of first clause and at second verb or clause marker). Use cj only for main clauses, not for adv or nom.
adv	Adverbial Clauses (See Quirk and Greenbaum) Like and different than even though no surface verb.
nom	Nominal Clauses (See Quirk and Greenbaum) Appositions that are clause even without verbs.
&	Continuations of clauses when interrupted are indicated by symbol plus & (e.g., m&)

PHRASE
------

np	Noun Phrase N + determiner ("a" or "the" only) Proper Noun Conjoined Noun Pronoun Compound (with or without hyphen)
npm	Noun Phrase Modified NP + one or more adjectives or possessives
vp	Verb Phrase VP = Main verb + any auxiliary, modal, and/or not = Verb plus particle
vpc	Verb Phrase Conjoined - compound verb
vpx	VP Complex Predicate adjective ("to be," etc. + complement) Verb plus adverb, related to verb only,including nouns functioning as adverbs (ran quickly, went home, I cried, too) Verb markers - started, stopped, used to, have to, gonna, etc. (disregard infinitive at clause level)
vpcx	Vp Complex Conjoined - combination of vpc and vpx
ap	Adverbial Phrase Modifying whole sentences rather than the verb, especially adverbs of time, "once upon a time," after that etc. If ambiguous, use ap if it's at the beginning of sentence. Then is a clause marker other unless it is clearly used as an adverbial rather than a connector.

Appendix IVD

pp Prepositional Phrase
Anything that starts with a preposition.
id Independent
Anything that stands by itself
(greetings, tags, affirmative or negative responses,
e.g., Thank You, Hello, Okay).

Clause Markers
+ = and, furthermore, moreover, what's more, in fact,
in addition, so.
- = or, nor, but, despite, however, then again,
instead, nevertheless
oth = then, next, like, etc.
wh = "wh-" questions

Contractions - use more than one phrase marker if necessary.
(Example: He's npvpx/
going /
away /)
& Continuation (same as for clauses)

PROBLEMS

Mark problems at beginning of language unit involved. If a problem affects a whole sentence or phrase, just mark once. Mark each repeated problem again for each new t-unit.

c Cohesion - Many but not all cohesion problems involve pronoun referents. Examples:
1. Pronoun referent - "He shot at him and he died."
(Not clear who each "he" refers to.)
2. Semantic incongruity
In a story about Saturn, "I stayed with my friend May."
(No previous introduction of May.)
3. Use of "the" when referent not previously established.
"So the man was riding me."
4. Picture referent - "The green field stands for . . ."
Referent is not within story but in picture written about, which is part of larger context.
Mark c once where apparent cohesion problem occurs and write "picture referent" on card.

d Dialect
This includes features considered low-status dialect. Do not also mark s if it is only a single problem, even if it results in inappropriate syntax. Examples (This is only a partial list):

1. Verb endings (many will involve final consonant clusters).
   "He walk home." (for past tense)
2. Colloquialisms
   "Me and the Princess were . . ."
3. Noun duplication
   "He ate them, all of the birds."
   "We want, me and my friends."
4. Subject/verb agreement
   "Then was some bats and ghosts . . ."
5. Prepositions as adverbs
   "After <meaning later> I went to see . . ."
6. Use of "a" for "an" (a elephant) - not considered invented spelling.
7. In cases such as those involving irregular past tense, listen to child's story rereading on tape to determine if problem is dialect or invented spelling. (If not able to determine, treat as dialect.)
   e.g. "I came home."
   If child reads as "come," code * come came d
   If child reads as "came," code come came

S Syntactic
This involves lack of control of syntactic constructions. These include:

subject/verb agreement
parallelism
word omission or insertion
inappropriate pronoun form (he for him) (when not invented spelling)
inappropriate conjunctions ("because" where there is no causal relation.)

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m Multiple
Combination of cohesion and syntactic.

x Complexities
Problems not otherwise categorized, but which seem unusual to the researcher. Examples:

1. oral language forms used in written language
   "Our class was scared, real scared."
2. developmental attempts to try something new, which don't quite work.
3. pragmatic issues - uncommon usages
   "It was 50 or 40 feet tall."
4. Embedded nominals at clause level or phrase level that seem to be functioning appositionally.

BEHAVIORS

See section in report on MOF for definitions. Use child's original first to mark revisions. Then use MOF for each behavior.

d = Drawing
i = Interruption
r =- Resource use
rr = Rereading
rt = Related talk
rv = Revision (look on child's copy for erasures
indicating uncoded revisions)
st = Stop and think
sv - Subvocalization
t = Teacher involvement

# - use when a behavior occurs out of sequence, following the behavior marker.

If a behavior occurs between words, code it with the word that comes next unless it's obvious that it would be with the word that came before.

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Appendix IVE: Narrative Analysis Instrument

(Only whole pieces can be coded

Plot/Events

1 - Events disorganized, out of sequence. No coherence among events. Events don't logically contribute to the message overall. Some events may even be difficult to understand separately.

2 - Some events logically contribute to the whole, but some are disconnected or out of sequence. Events are not explained fully. Usually one sentence suffices. It is apparent that the writer is constructing the events as she/he goes along without thought of the whole. There are few cohesive ties, and some are ambiguous. (Example: Alice 10-20-81; 10-29-81)

3 - Most events contribute logically to the whole and are sequenced appropriately. Story flows without major interruptions from inappropriate or irrelevant information, yet some events have little detail. Often whole events are described with one sentence. (Example: Micah 01-05-82A; Alice 12-08-81.)

4 - Events contribute logically and sequentically to an ordered whole. It is apparent that the writer has constructed each event to fit systematically within the whole and has provided detailed relevant information about each event. The writer controls and directs the events rather than merely reporting them. The writer demonstrates many varied uses of cohesive ties. (Example: Micah 11-17-81B.)

Characterization

1. Character/s inappropriate to the piece. Character/s may be mentioned, but the piece is written from the vantage point of writer as character without separation of self from character's. No distinction between major and minor character/s.

2. Character/s appropriate but somewhat ambiguous. Emphasis is more on plot than character. It is usually clear what happened but not necessarily to whom or by whom. Cohesive problems occur which add to the ambiguity, yet there is an attempt to tell about someone other than the writer/self. (Examples: Micah 2-2-82; Alice 4-29-82.)

3. Character/s appropriate and clearly identified. There is an attempt here to provide information about how the character/s felt as well as what she/he thought and did. There may be a distinction between major and minor characters. (Example: Micah 11-17-82B.)

4. All characters are well defined and elaborated. The writer demonstrates control of character development and distinguishes clearly between characters. Some are definitely major and some minor.

Appendix IVE

Setting

1. It is not clear where the action takes place nor does it seem in any way to interact with what happens.

2. Setting is mentioned. It is clear where the action happens, but it is given no real role in the action. There is almost no description provided, usually a label. (Examples: Alice 5-6-82; Micah 1-5-82.)

3. Where the action takes place contributes to the piece as a whole. The writer makes an attempt to describe setting and its effect on the action and/or the character/s in the place, but setting is not fully developed. (Example: Micah 3-30-82; 11-17-81S.)

4. The writer describes setting fully and also clearly indicates what effect it has on the character/s and events.

General Quality Statement

1. Piece is not semantically integrated: there is little intra-sentence coherence and almost no inter-sentence coherence. The piece is more a collection of sentences, clauses and/or phrases than a coherent piece of discourse. No overall purpose or audience is evidence.

2. There is evidence that the writer in attempting to order events, introduce and/or label character/s, and/or to direct a message of some kind for a purpose. There is audimentary evidence of a conflict and some type of resolution or an indication of related events occurring across a time frame. Setting may be identified but will not be developed.

3. The piece has a beginning, a middle and an end with related events and/or character/s operating in some time frame. Setting is revealed where appropriate and its effect on character/s noted. Some details of the events are provided with appropriate mood and tone. A sense of coherence is evident which indicates that the whole is greater than the sum of the parts.

4. The piece is obviously the result of an integration of purpose, audience, voice and controlled syntax. The events flow logically from one to another with purpose and/or message clearly evidenced. Character/s and/or ideas are well developed and all conflicts are revolved. There is a sense of the writer in control of the tools for conveying a purpose to an audience of some kind.

Appendix IVF: Textual Cohesions Texts

Stories Related to Tempenal Expressions Year I
Elaine's Text

Story #1 11/3/81

1 The cowboy was at the rodeo

2 he went to go see the horses and he was riding the horses

3 So he went to the Indians and there was a Indian and so he went to go see the rodeo and I was riding the horses so the man was riding me and I went to the rodeo me too

4 The rodeo was over so then the people went home and there had a rodeo and we went to the rodeo and my Dad went to the rodeo and he and he got mad

Story #2 11/5/81

1 One day the cowboy went to go see the horse and the people went home.

2 They had a rodeo and we went to the rodeo and my dad was there too and we went home and my Dad went home and they had a rodeo and my Dad was mad.

3 And I was mad too and the people went home and that day they went to school.

4 The cowboy went home and went to sleep and the next day the cowboy went to the rodeo and we went to the rodeo.

Story #3 11/10/81

1 One day the cowboy had race and the cowboy went to the carnival and the cowboy rode the rollercoaster and he went to the rodeo to got the horse and he was in the rodeo and they had a race a then they went home and the people went home and they had another rodeo and the people went to the rodeo and the man had a carnival and we went to the carnival and my dad went to the carnival and Virgil went to the rodeo and he said tell Francine that I love her

#4 12/3/81

1 One day the sun came out and the snowman was out and.

2 He melt (ing erases) and I started to cry and my mom get back from work and.

3 I get back from school.

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#5 12/10/81

1 One day the sun came out and the snowman was out
2 He melted
3 I started to cry.
4 My mom said Do't cry.
5. I stopped crying and made another snowman.

#6 1/8/82

1 One day I was skying in Arizona me and my friends.
2 and then they started to laugh me to.
3 And we went.
4. Home
5 Then we had a party and it was cold
6 Then we went to sleep
7 we went back to the arizona skying place then we went to town
then we went home

#7 2/2/82

1 There is a giant in sells.
2 He has two elves
3 he makes them work
4 the Dragon and the giant fight
5 the two elves like to sing
6 the Dragon and the giant live in the castle
7 there is a pirates in arizona
8 there is a troll
9 there is a elf
10 there is a Hunter

#8 2/4/82

1 There is a castl.
2 It has a flag on the castl.
3 There is a door on the castle.
4 It has grass on the ground.
5 The people are happy.
6 Because its warm in the castl.
7 One day the King tells the people...

Appendix IVF

#9 2/16/82

1 Once upon a time.
2 Paul bunyan was a baby he.
3 grew big
4 he went to the trees
5 he had a axse with him.
6 He hested(had chopped)the trees with one axse
7 he is big
8 he is strong
9 he makes earthquakes
10 he makes waves
11 he kills animals

#10 2/18/82

1 Once upon a time
2 John Henry he is strong
3 He floxs(fix) the road
4 he holps (helps) people
5 he holpd (helped) a girl
6 say (she) said.
7 (Good bye erased) thank you

#11 2/25/82

1 One upno a time.
2 there was a man.
3 He kills a birds.
4 He tllek(took) the birds to hiss house.
5 he soll(saw) lots of birds.
6 He eat them all of the birds he got.
7 The people he eat the.
8 People
9 he is a Inedina(Indian).
10 He has a big horse
11 he gots big Feet

Appendix IVF

#12 3/4/82

1 One day a.
2 Girl was woring(walking) in.
3 The woods and a wolf kimerm(came) out of the woods.
4 She was going to hry(her).
5 Gronmouthre the wolf.
6 Was in the woods he went to.
7 Hry (Her) Gronmouther.
8 He was in hry (her) Gronmouther bed he get.
9 Hey(Her).

Gordon's Text

#1 11/3/81

1 One morning a cowboy was looking for some cows an for some horses
2 bu't they didn't because they didn't wake up to early and they Onle came back with 5 cows an 3 horses.

#2 11/19/81

1 One day Micah Antone went to have a feast with the plabos(?).
2 bu't as they went a storm came and Micah Antone didn't know what to do with the people.
3 then All the people were Mad.

#3 11/24/81

1 One day a turkey got out of his home
2 his mother was weda(worried) about him.
3 he was walking in th woods and he got eatain up.

Appendix IVF

#4 1/5/82

1 Once opon a time A Elf Named #38 was At our Class Room and almost got samsed (smashed) by Jeanette

#5 1/7/82

1 One day I went Wheth (with) some People to the Grand Canyon
2 And we went wheth some horses
3 And when we got there We Went donw to the Canyon
4 When we got donw the Canyon we clameyd (climbed) some hells (hills).
5 When We Wher clmeing the hells a volcano elxeBed(exploded) and we Almost Fell donw into the water.

#6 2/11/82

1 Once thir was a parrot named Darwtow
2 And ever (every) morning and night Darwtow wood sing his very best song
3 it gose like this LALALALA to me
4 then in the morning Darwtow wood sing hi s very best song again LALALALA to me

#7 3/4/82

1 One day Some Solridgrs (soldiers) were huting (hunting) for Old Old man and the Solridgrs did find some Old Old man
2 when they find Old Old man they wuep(whip) them with A blck (black) whip.
One day two Old Old man herd about the Sotridgrs
4 When the two Old Old man
5 When he(?) talking about the Sotridgrs
6 The Sotridgrs...

#8 3/30/82

1 One day when I went to Switzerland and I saw a lot of houses and buildings
2 as I was walking down the seat(?) a man said do you live here.
3 I said no
4 he said oh.

Appendix IVF

Dana's Text

#1 11/3/81

1 One day in the wild west a cowboy went to the bank and got some money
2 he got lots of money that a robber and his horse wanted to get him.
3 But he got home before he could get him.
4 But he shot him insted and mist him.
5 So he went to the bank and robbed it with his horse and brok the window and ran away with his money.

#2 11/5/81

1 One day in the wild west a cowboy went to the bank and got some money.
2 He got lots of money that a robber and his horse wanted to get him.
3 But he got home before he could get him.
But he shot him insted and mist him.
5 So he went to the bank and robbed it with his horse and broke the window and ran away with his money.
6 The police were going to get him before he got away but the sheriff came out of the jail and got him and put him in jail.
7 Before they could put him in jail they new that they got the rowng one.
8 So they had to look again for the real robber.
9 Then they found him and put him in jail and tat was the end of the robber.
10 The End

#3 11/10/81

1 One day Sam took his horse for a walk in the woods.
2 Sam was going hunting for deers he saw a lost horse.
3 So he took it with him to his barn and gave him some food he named him Tod
4 Then he put Tod in the barn with...

#4 11/19/81

1 Micah Antone was very nice to his crew.
2 He was their captain.
3 he told them what to do.
4 One day one of his men were going to die,
5 The women got Bob that was his name.
6 They were taking care of Bob.
7 Micah was there to with Bob.

Appendix IVF

#5 1/7/83

1 One night my parents were taking me to a basketball game.
2 The Phoenix Suns were playing.
3 When the game was overed the Phoenix Suns won 64 to 44.
4 I was happy because the Suns were my favorite basketball team.
5 Then I went to the Suns bench.
6 I said "that was a nice game you played.
7 They said "Thank you:
8 your wulcome
9 I said "could I be your bench warmer.
10 They said "o.ke
11 I said thanks
12 Then I went back and told my mom she was suprised.
13 So I went back.

#6 1/12/83

1 We talked about the state seal and state bird.
2 We had to read the paper.
3 Then we wrote a story.
4 Until the bell rang.
5 The state bird's name is the cactus Wren.
6 Yesterday we did the state flag.
7 with Miss Henn.
8 We had to find out what the yellow and red stripes mean what the copper star stand's for.
9 Same with the state bird and seal.
10 For the state bird we had to find out where it lives and what it eats and it's name.
11 Then the bell rang we had to change.
12 Tomorrow I have to finish the state seal, bird and flag.
13 Today I am sapouse to finsh the state flag.
14 But I didn't have a chance.

Appendix IVF

#7 2/4/82

1 One day in a castle a King and Queen wanted their daughter to get married.
2 But their Prince was kidnapped by some Pirates.
3 The Prince name was George.
4 George was heald in a cell.
5 The cell had no windows.
6 So the Prince couldn't escape.
7 So the King sent out some of his men to rascue the Prince.
8 Finally they saw the castle.
9 The pirates men spotted them.
10 So they both charged into battle.
11 The men had fights.
12 The Kings men finally won.
13 They went to rascue the prince.
14 Soon they found the cell that the prince was heald in.
15 So the (they) ruscued him.
16 When they ruscued George they went back to the Kings castle
17 the prince and princess got married.
18 THE END

#8 2/23/82

1 Once there lived a warrior.
2 His name was Running Bear.
3 He liked to shoot birds for his dinner.
4 One day Running Bear didn't find any bird's.
5 Some hunters were scarying (scaring) them away.
6 He wanted to find out what happened.
[illegible]n he saw the hunters
[illegible] they greeted each other.
9 Running Bear told them why they were scarying the birds.
10 They said because we're shooting rabbit's.
11 Then the hunters left.
12 Then he countinued on with his hunting.
13 he found lots of birds.
14 Running Bear shot some bird's and ate it for his dinner.

Appendix IVF

#9 3/4/82

1 ONE DAY THE MIAMI DOLPHINS WERE GOING TO PLAY THE BUFFALO BILLS.
2 THE DAY CAME FOR THE GAME.
3 AT HALFTIME THE DOLPHINS LED 10 TO 6.
4 WHEN THE GAME OVERED THE DOLPHINS WON 16 TO 6.
5 IT WAS A EASY VICTORY.
6 THE DOLPHINS WELL HAVE TO GET READY TO PLAY THE SAN DIEGO CHARGERS.
7 WHEN THE DAY CAME FOR THE GAME.
8 THE DOLPHINS WON IN OVER TIME.
9 41 TO 38.

Rachel's Text

#1 1/5/82

1 Once upon a time I saw a elf and I saw him in a tree and he con'de (couldn't) get out.
But some people got him out.
3 so we code(called) him #38.
4 did you know that his name youstbe (used to be) John
5 it was a fine name
6 But we like his name know (now?)
7 it is a fine name
8 he was gart (great)!
9 we play with him
10 I is fun (It was fun).
11 we played not it
12 it was fun
12 we like him
13 he was nise
14 we play on the hall
15 the End Goodbye!

Appendix IVF

#2 1/7/82

1 One day we saw some peple
2 They wer going to the mountains on a horse befor They Paet (paid?) and They wend off.
They wend to the Grand Canyon.
4 I thate(thought) that it was fun
5 I WISh I went,
6 The end

#3 2/2/82

1 Once upon a time There was a Dragon a princess and a Price (Prince)
2 One day the princess was in the castle.
3 She had a Godmother.
4 She was very mad sometime.
5 but not all the time.
6. She was veay(very) rich.
7 The End.

#4 2/11/82

1 One day in winter there was a bear and the bear lived in a cave and his name was circle.
2 and he was veary nice.
3 and how come he sepples(sleeps) all winter.
4 becouse the bear whay (why) the bears sepples(sleeps) all winter?
5 how I know
6 because They go huntna(hunting) at sunter(summer) and I know how They haves a big ears
7 he got fake ears.
8 he liked it in winter becouse.

Appendix IVF

#5 2/23/82

1 One day I saw my grandmother
2 She told me a legend
3 after I went to see my bears cave he was mad
4 That night he broke in our house and he sarend(scared) me
5 I told my Grandmother and that is what the legend was adlete(about)
6 So know(now) It is night
7 Know (now) I am rend(scared) that night and the legend was adlete (about) a bear
8 I wish it was trow and when she....

#6 3/4/82

1 Once upon a time there was boy
2 his name was Micah and his brother Manfred live with Enna and Tiffany
3 They lived all tather (altogether) and at night
4 They were happy becouse they had a party and they Play gamed
5 thay had fun
6 and Micahs brothear Manfred, and Tiffany. wend out sid
7 They had to get wood.
8 and When they came backthe party was over
9 aver booy (everybody) was gone
10 and Micah and enna were a sepple (asleep)
11 and it was
12 and when Manfred and Tiffany wher screedy (scared)...

11

Appendix IVF

Anna's Text

#1 10/20/81

1 A man was going home
2 a sand man got him the nax(next) monning
3 they did not find him
4 The Place(police) said we cet(can't).
5 But we did not find him.
6 then a lady cet(killed).
7 then one night they fid(find) out
8 then it was wolfman
9 they cat(killed) it.

#2 11/10/81

1 Tow (two) boys lived with same his Farth(father).
2 One day the rodeo came and his Farth was in it.
3 He was the winner.
4 Then they went home and celebrated.
5 The next morning he did not go to work.
6 His captain said, you are fired.
7 then he said(stayed) home and looked in the newspaper for a job.
8 He ford (found) one.
9 He sort (started) it the next morning.

#3 2/2/82

1 One day a queen and her prince got mardit(married) in a castle.
2 the next day a witch was after her.
3 The next morning the queen said mouthr (mouther) when are we going to have breakfast
4 the mouthr said in a little will (while)
5 The mouthr went into the kentine (kitchen)
6 the queen went back to her room.
7 The witch put punt (poison) in it.
8 they eat and the queen was bad.
9 The End

Appendix IVF

#4 2/4/82

1 One day a girl name sellies she was a prine (pretty) girl.
2 One day she was timeeing (taking) a naped (nap).
3 A mad pirate got her
4 he want (went?) into the wolkd (?) and got sellies.
5 she was at home.
6 But when she work (woke) up she was saryd (scared).
7 at home the father there to call for her.
8 But thay kill the queen.

#5 3/11/82

puppy?
1 One day there was a papyg(papygo?) ho (who) was plaing at the parak.
2 One day the clook(clock) srod (struck) theer (three).
3 the papyg rand (ran) home because his mastr came home.
4 When he was going home a car hite him.
5 The papyg fally (fell?) down.
6 The man that hite (hit) him got the papyg was on count (unconscious).
7 The man and his drin (daughter) went to the circus because he olddid (owned) the circus.
8 One day they had the circus
9 the papyg was in it.
10 The master went.
11 When the circus was over the papyg brac (barked).
12 the marst (master) nost(noticed) the barc(bark) and he said did that sond (sound) like the papyg.
13 I am the papyg.
14 And they tork (took) him home.

#6 3/30/82

1 Whan I was in Switzerland in the winter they have a horn that claus (calls) the cows home.
2 And they have ski like us.
3 And the (they) do not have house like us
4 there house are big and on the top it is big.
5 there mountains are not like us
6 they are hilloy(hilly).
7 they are not like ares(ours) rer(really) some (something).

Appendix IVF

Jean's Text

Jean #1 11/3/81

1 There was a cowboy who like to watch the rodeo.
2 He became a cowboy
3 he was in the rodeo.
4 He got a pries form a rodeo.
5 He got a job form a man.
6 And then he got marired to a girl.
7 They had a baby.
8 He aet (ate) egg and beans.
9 He was a fat man.
10 He was a very funny men.
11 He went to a bar.
12 The next day he was in the rodeo.
13 He wan a pries in the rodeo.
14 The End

Jean #2 11/10/81

1 There was a cowboy who joed (joined) the rodeo.
2 There was a cowgirl who joed the rodeo too.
3 They were both good in the rodeo.
4 Every year the both of them love it.
5 They practst's (practice) every day.
6 That they wan frist pries.
7 They ready (really) love it too.
8 They wan money.
9 They were rich too.
10 After that they went to the fare(fair) to ride.
11 They played game and game.
12 Him and anather cowboy got in a fight and one of the onther (other) man got hurt and had to go to the hospito.

Appendix IVF

Jean #3 1/5/82

1 My name is elf number #38 and I fell down when Santa came down.
2 And I got up and went into one class room and I fell a sleep and someone omas (almost) step on me and I ran away and never came back agian.
3 But when I was there I had a very nice time there to.
4 It was fun sleeping in your room.

Jean #4 2/2/82

1 Once upon a time I went to a cactl(castls) and I saw a queen and a king.
2 And they went to there room upstirs untill dinner time.
3 Then they will come down stirs to eat there dinner.
4 And they went to call the servins (servants) because someone try to rob them
5 they started to fight.
6 And one of them got kied (killed).
7 And the king and the queen lived happily ever after.

Jean #5 2/9/82

1 The dragon spite (spit) fire because he drink gas and after that he started spiting fire at people and killed some.
2 The sheriff killed the dragon.

Jean #6 2/11/82

1 The snake was crowing (crawling) in the desert.
2 And he was laughing and he did not see where he was going.
3 And he ran into some ratles (rattles) and now he has ratles in his body.
4 And when we see a ratlessnake we hear the ratles in his body.

Appendix IVF

Jean · **#7** 2/16/82

1 Once upon a time there was a baby that was born.
2 And we know that he was a big baby.
3 He siad when I grow up I will be a railroad builder.
4 And he grue up to be a railroad bulder he was a good one too.
5 He was faster than anyone elsy in the world and then he was in a race with a nother man.
6 He had to win.
7 And the race begin.
8 It was a long time before the race was over.
9 John Henry won the race he got a prize for it.
10 His prize was a ticket to go to the movies.
11 After that he went to his friends house.
12 After that he went to a house ware (where) his brother lived at.
13 then he went house.
14 the End

Jean **#8** 3/30/82

1 If I lived in Switzerland I wood cliam the mountains over there.
2 When I want to go home I wood blew a horn.
3 That would tell my mother I am coming house.
4 When I go home I will have to eat and take a shower and go to bed.
5 Because I have to get up eray (early) and go to school.
6 I will go and say good night to my mom and dad.
7 And then I will go to bed.
8 In the morning I will get up eray and get raddy (ready) and eat my breakfast.
9 Then I will go to school.
10 After school I will go to cliam the mountains again.
11 After that I will go to a lake and to a river to see the fish in the water.
12 Then I will home and eat take a shower and go to bed.
13 In the morning I will get up in the morning and go to school.
14 That was the last day of the school year.
15 Then I can play alot of games.
16 My mother said "Yes you can play alot of games".
17 So I went outdoors and called my friends.
18 Then we played alot games untill lunch time.

Appendix IVF

Stories Related to Cohesive Year II

Elaine's Texts

I went to the fun house .
I got scared .
Then I started to cry .
I was a ghost .
My friend was a ghost too .
We scared everybody at the hospital .
Cheri was a witch .
She was a real witch .
We were real ghosts .
We had a pumpkin pie .
We ate it .
It was good .
Me and Ms. wilde went to go out to eat .
Then we went to go watch a movie .
we bought a pop and some popcorn .
We watched " Annie . "
Then we went home .
Then we went to the carnival .
The next morning we went to the carnival in Ms. Wilde's car .
My mom did not let me use our car to go .

One Christmas day we went to town to watch a movie at town .
we watched Charlie Brown .
It was fun .
We ate some popcorn .
Then it was over .
Then we went home .
Then the next morning we went to get some gifts for tonight .
Then we gave the gifts out .
I got some shoes and an E.T shirt .
The End

The Day the Sioux Came to Town
One day the Sioux came to town because they were dancing for the people .
She had feathers and a stick and design rings and a feather in her hair ,
and she was a good dancer .
They live way out in the desert .
They live in tepees .
They put designs on the tepees .
They always wear dresses .
The men wear moccasins and the bottom of a dress and hold a stick .
Feathers , too .
He wears bells , too , and paints his arms , and wears sticks on his head and a black thing over his head , and ribbons on his arms .
They are red and white .
And he wears feathers on his moccasins and bells on the top of the dress .
And he puts a star on his stomach
and he wears a belt , too .
The belt has bells , too ,
and the dress has leather hanging from the dress .
He paints the thing on his head and has feathers on the ribbons .
The End

17

Appendix IVF

2/10/83 A

The Entity

One day we went to watch = The Entity .
It was scary because a man was trying to kill a woman .
But her son was trying to get him ,
but he broke his wrist .
At night her room began to shake
and the doors slammed real hard .
But she was not scared .
But on the first part she got popped in the mouth ,
and all the blood was in her mouth .

2/10/83 B

Me and My Friends

One day I went to my friend's house .
Then she said , " what do you want ? "
I said , " Can you play ? "
She said , " Yes . "
Then we went to my house .
we played dolls
and we built a dollhouse .
It had a door window and flowers around it .
It was a big house ,
and we even played in it ,
and all the kids came in it , too .
And so all the kids brought their dolls , too .
Then my friends went home .
The next morning they came over to my house .
They wanted to play in my dollhouse ,
so we all went in the dollhouse .
Then we started to play .
Then my mom came outside .
She said to me , " Come in , Enna .
It's time to come in .
we have to eat dinner . "
I said to the kids , " I have to go in and eat . "
So the kids had to go home .
I said to the kids , " Good-by . "
The kids said to me , " Goodby to you , Enna . "
The End

4/14/83 A

One day we went to the University of Arizona .
We went to Miss Vaughan's house .
Then she showed us all around her house .
Then we went to Miss Kasten's house .
Then we ate .
Then we went to go swimming .
Then we had to go back to Miss Vaughan's house .
Then we had to go to sleep .
Then we got up and went back to Sells .
The End

Appendix IVF

Gordon's Text

Pac Man is eating the ghost .
Baby Pac Man is helping Pac Man .
The ghosts are saying , " Help us . "
The other ghost is saying , " I can't . "
Mrs. Pac Man is looking for Baby Pac Man .
The sun is burning the tree .
The tree is saying , " Ouch . "
The next day Pac Man took Baby Pac Man for a walk in the park .
Then the ghosts were chasing Pac Man and Baby Pac Man .
But Pac Man and Baby Pac Man ate the ghosts up .

One Halloween night when I was trick-or-treating I saw a scarecrow .
It was alive .
Then it started to chase me .
Then I ran all the way home
but there was a Jack-o-Lantern .
It was looking at me very mean .
Then the Jack-o-Lantern was chasing me too .
Then two things were chasing me .
Then I got tired of running
and I fell down on some grass
and I fell asleep for 6 hours .

EXPECTED RESPONSE TEXT - GABDE2/A02

One Christmas night I left some Christmas cookies for Santa .
But when Santa came to get the cookies , the cookies were not there .
Santa did not eat the cookies .
Santa knew that Darnell ate the cookies because Darnell saw me bake the cookies .
The next day Santa came back
and I gave Santa some cupcakes
and Santa said , " Thank you . "
And Santa said that I will get some presents if I be good .

For the whole year I was good .
And one Christmas Eve night Santa came down our chimney
and he gave me millions and millions of presents .
And the last present I opened was a big bike .
I tried to ride it
and I fell off because I was not hanging on .

Appendix IVF

2|3|83

AVALANCHE IN BETHLEHEM

There was once a high mountain
and over that high mountain lived a little town called Bethlehem .
In one of the houses lived a lady and a boy named Mary and Jesus .
One day when Mary was cooking she saw a bundle of snow falling from the mountain .
Then Mary said , " Jesus , do something . "
Jesus said , " I will put a ring around the earth . "
When Jesus put a ring around the earth the snow just melted
and all the people in Bethlehem started to sing , " God is our father . "
After they got through singing they all said , " God and the sisters are the spirit of Bethlehem . "
The End

3|24|83

The Day the Indian Got Power from God

There was once a boy named Little Knife .
Little Knife was brave and fast
but he was not strong .
One day Little Knife's father said , " Little Knife , come with me .
We are going hunting .
You can help me carry the deer . "
Little Knife got scared when his father said that he could carry the deer with him .
Little Knife said , " Father , I am not strong . "
" Little Knife , " said his father , " don't worry .
When you pick up that deer God will give you power . "
When Little Knife picked up the deer God gave him powers .
Little Knife was so happy he carried the deer all by himself .
He said , " From now on I am going to carry the animals we catch for you . "
When Little Knife got home his mother said , " Little Knife , go get some more wood for the fire . "
And he brought lots of wood for the fire .

The Day the House Burned Down . 4|4|83

by Gabriel Cacnora

One evening day a house caught on fire .
Then a boy saw the fire and called the fire department .
They came as fast as they could .
The hospital and the ambulance driver got a call
and the ambulance driver got there as fast as he could .
When the lady that owned the house saw her house burning she said , " What is going on here ? "
A fireman said , " Well , your house burned down . "
The lady got mad and ran away and never went to look at her house .

Appendix IVF

Dana's Text

The Daisy

One day a man was cutting some weeds .
After the man got finished cutting the weeds , a daisy grew .
The man tried to pull the daisy out .
Then he tried to cut the daisy with his scissors .
But the scissors got caught .
The man tried to pull his scissors out .
When he pulled them out they were bent .
Then he tried to saw the flower down .
But the edge got soft .
Then he tried to flatten the daisy with a big tractor-like thing
.
But that didn't work .
Then he tried to pull the roots out .
But the root was long .
Then he tried to blow the daisy up .
But he blew himself up .
Then a little girl got it and pulled it very gently
and it came off .

The Rodeo Story

One day I went to the rodeo .
When I got to the rodeo , a man was getting bucked off a wild horse
.
The clown helped the man get away before the horse kicked him .

Then came steer wrestling .
A man named Harrington Narcho was first .
He raced on his horse after the calf .
Harrington roped the calf
and the calf fell down
and Harrington roped the rope around the calf's legs .
Then came last but not least bull riding .
A kid from Alabama was first .
After his ride he won the rodeo .
THE END

Papago Legends

One day my grandfather told me a legend .
It was about an eagle .
The eagle had a baby bird .
The baby bird looked cute .
The mother one day had to go get some food for her baby .
When the mother returned her baby was gone .
A wolf had taken her baby bird .
She looked all over for her bird and couldn't find her .
Then one day she found out that wolf had her baby and was going
to cook her baby .
Before wolf could cook her baby the eagle popped out .
They had an argument over the baby bird .
Then they started fighting .
Eagle won the fight .
So Eagle got her baby and went .
When they got home they ate 5 fat worms .

Appendix IVF

The William Tell Story
The movie was about a great man .
Well , one day William was fixing a bow and arrow for his son's birthday , when a father came to talk to William about a meeting .
He said , " Can you come to a meeting tonight ? "
William said , " No , because it's my son's birthday . "
So the father left .
Then William went back to work .
When his son was on his way to William's for lunch he met some men .
They were mean men , especially the one in the wagon .
The boy was brave enough to tell them off .
Then they were going to eat the goat .
But they didn't want the goat
so they threw the goat down .
The boy got the goat and ran to William .
He told him all about it .
They went because it was getting dark .
When they got home they all celebrated his birthday and on the same night held the meeting .
One of them was a traitor .
So he told their master .
After he had heard , he said , " Stand up a pole with my hat on it . "
When they did everybody had to bow to it , except William didn't .
When they caught him , they made him shoot an apple off his son's head .
When he did , he threatened the king .
The guards were going to kill them , when the townspeople killed them .
After that they celebrated his son's birthday .

2/23/83

One day I invited my enemy over for dinner .
I made him some soup .
I put 1 toad leg , 2 lizard tails , 4 eyeballs , 3 fried worms , 2 caterpillars , 7 rabbit's hearts , 2 deer's guts , 2 bat wings , 3 poisoned snakes and 10 hot coals , and 3 cans of hot sauce in the soup .
For dessert I gave him 3 poisoned mushrooms , 2 cat's ears and a can of shaving cream , and a cherry .
He thought I liked him but I hated him .
After he finished eating he got sick .
He had to go home .
His parents took him to a hospital .
But he died before he got there .
When I heard he had died I was happy because I didn't have an enemy anymore .
And I lived happily ever after .

Appendix IVF

I enjoyed the trip to the Arizona Sonora Desert Museum .
When we got there we were separated in groups of numbers .
I was a five .
We saw a snake first .
A lady told us about the snake , what it does and stuff like that .
The part I liked best was the cave .
We saw how the earth began .
I watched a little movie about how lava comes out of volcanoes .

Then we went and got some rocks .
Then we went to the beaver and otter exhibit .
The animals were not playing .
But they were in their homes .
We saw beaver traps and skins .
We saw the birds next .
After that we saw a bear .
Then we saw a jackrabbit and wild pig .
Then we saw a wolf , deer , skunk , and baby red wolves .
Then we saw all kinds of snakes .
The last animals we saw were the scorpians and lizards .
The scorpians were glowing .
The lizards were just chasing each other around .
Then we went back to school .